

# 2022 China Fintech 50 Report





## Disclaimer

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KPMG China Fintech Series Reports

About KPMG China

# Foreword



Honson To

Chairman,  
KPMG China and  
Asia Pacific

2022 was a crucial year that marked the beginning of the Fintech Development Plan (2022-2025), as well as a period in which the country transitioned from strengthening the pillars and framework of fintech towards harnessing the sector's growth momentum. To support the long-term, stable development of the fintech sector, in 2022, financial institutions fully engaged in digital transformation and more effectively applied innovative financial information technologies, and they also played a role in improving the top-level system and developing a system for fintech ethics and prudent regulation.

In this critical moment for fintech development, KPMG China is announcing the 2022 China Leading Fintech 50 and Emerging 50 lists, which showcase a range of well-developed and technologically savvy enterprises. 2023 marks the seventh consecutive year in which KPMG has published the China Fintech 50, which started in 2016, and we are as excited as ever to be participating in the fintech market and witnessing its phenomenal changes and milestones. We are confident that the fintech sector is becoming more open, innovative and sustainable while keeping risks well under control.



Jacky Zou

Vice Chairman and  
Senior Partner,  
Northern Region,  
KPMG China

The core ABCD technologies (AI, blockchain, cloud computing and big data) are steadily maturing, and emerging technologies such as virtual reality (VR) are booming. These technologies are driving development, empowering financial data centres and computing power centres, and opening up comprehensive financial scenarios. In the midst of their digital transformations, financial institutions are harnessing the power of financial technologies to cover and integrate diversified scenarios and customer groups. Through a model that combines technology, finance and industry, enterprises are fusing the digital economy with the real economy to expand the scale and reach of innovative financial services. In recent years, innovative fintech enterprises that leveraged advanced core technologies have gained an edge, and they are now well-positioned to use their comprehensive technological solutions and fintech capabilities to help traditional financial institutions make breakthroughs in the integration of the digital economy and real economy.



Tony Cheung

Vice Chairman, Head  
of Financial Services,  
KPMG China

As the digital economy permeates every aspect of our lives, financial sector enterprises are asking themselves how fintech can be used to better serve the real economy and promote digital transformation. Going forward, fintech enterprises will continue to provide clients with all-inclusive support throughout the industrial chain and corporate life cycle, covering all business processes and data dimensions. Recently, we have seen huge leaps in technological progress. Artificial intelligence (AI) algorithms and data intelligence are becoming more accessible; innovative security technologies such as privacy computing have made significant progress; and computing power solutions such as hardware acceleration have continued to unlock gigantic computing power. Against this backdrop, demand is surging across a range of key scenarios, including financial IT innovation, green finance, supply chain finance, financial regulation and e-CNY. The future is bright for the quality development of the financial sector, but it is crucial that this development take place in a secure manner. As the top-level system improves, and technologies and finance become more closely integrated, the fintech sector should focus on both innovation and risk control, as well as institutional regulation and self-discipline, in order to meet the industry's need for both financial development and financial security.



Thomas Chan

Head of Financial  
Services Assurance,  
KPMG China

As China's fintech sector continues to evolve, it is empowering financial institutions to achieve high-quality digital transformation. In our visits to fintech enterprises, we saw the financial sector serving the real economy in various scenarios, and we found that new trends around business logic, business models and industry ecosystems are deepening the integration of technologies. As a result, fintech is being more precisely positioned, and the roadmap for its implementation is becoming clearer. In the field of green finance, financial institutions face difficulties in capturing green data and identifying, certifying and labelling green assets. In this context, technologies such as big data and blockchain provide the answer by ensuring the traceability and immutability of underlying green data. Meanwhile, demand for supply chain finance services has been growing, and end-to-end data penetration is a major development direction for technologies in this sub-sector. In the paytech field, cross-border payment has opened up new markets as smart contracts and cross-border payments are expected to expand opportunities for the use of e-CNY. Leveraging their technological expertise and insight into the financial sector's transformation, a number of leading fintech enterprises are playing an active role in China's financial modernisation.





# Overview

# 2022 China Leading Fintech 50 and Emerging 50

## Introduction

KPMG endeavours to promote the sustainable development of China’s fintech sector. KPMG launched the first China Leading Fintech 50 list in 2016, which was widely recognised, and since then KPMG has released the China Leading Fintech 50 list and report every year.

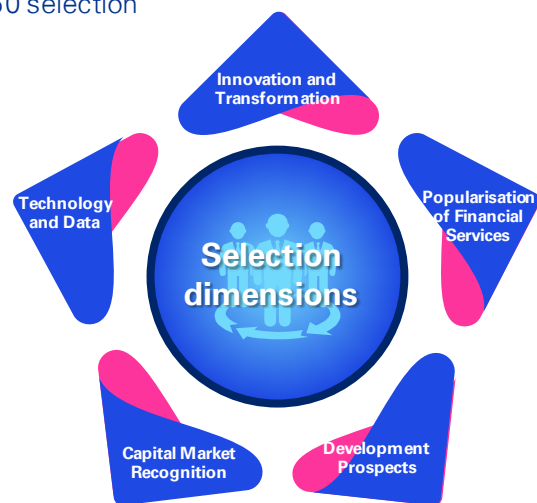
## Composition of the Selection Committee

The Selection Committee comprises a number of external experts, along with dozens of KPMG representatives from China and the global firm. These individuals are specialists in various fields, including information technology, data, capital markets, venture capital, risk management, finance, macroeconomics and financial services.

## Core Selection Criteria

The five core dimensions of the KPMG China Fintech 50 selection process are as follows:

- Technology and Data Recognition
- Innovation and Transformation Industry Development
- Popularisation of Financial Services Prospects
- Capital Market



KPMG has independently developed the Startup Insights Platform (SIP) Model, which takes into account the above-mentioned core areas to quantitatively evaluate enterprises across multiple dimensions, including collaboration, technology, product, market and financing.

*Note: The selection of the Leading Fintech 50 and Emerging 50 is designed to draw attention to technological innovation in the financial sector, promote industry exchanges, and advance the development of fintech. It does not evaluate the compliance or investability of the participating companies, nor does it interpret any regulatory policies.*

# Segment distribution for the Leading Fintech 50

**Integrated Fintech**

**Wealthtech**

**Insurtech**

**Inclusive Technology**

**Supply Chain Technology**

**Paytech**

**Regtech**

**Integrated technology empowerment**

**Big data & AI**

**Blockchain, privacy computing and security**

**Distributed computing, cloud computing and hardware acceleration**

Platform Technology Empowerment



# 2022 China Leading Fintech 50 and Emerging 50 — Leading Enterprises List



Short name of  
enterprise

Full name of enterprise

Years in which the  
enterprise was shortlisted

 <b>360 DigiTech</b>	Shanghai Qiyu Information Technology Co., Ltd.	2022/2021/2020/2019
 <b>Bairong, Inc.</b>	Bairong Yunchuang Technology Co., Ltd.	2022/2021/2020/2019/2018/ 2017/2016
 <b>AIBANK</b>	CITIC AIBank Corporation Limited	2022/2021/2020/2019/2018
 <b>IceKredit</b>	IceKredit, Inc.	2022/2021/2020/2019/2018/ 2017/2016
 <b>Bubi Technologies</b>	Bubi (Beijing) Network Technology Co., Ltd.	2022/2021/2020/2019/2018/ 2017
 <b>DataGrand</b>	Datagrand Information and Technology (Shanghai) Co., Ltd.	2022/2021/2020
 <b>Dashu Creditech</b>	Shenzhen Dashu Creditech Co., Ltd.	2022/2021/2020
 <b>HUNDSUN</b>	HundsunTechnologies Inc.	2022/2021/2020
 <b>Tigerobo</b>	TigeroboNetwork Technology (Shanghai) Co., Ltd.	2022/2021/2020/2019/2018
 <b>ArchForce</b>	Shenzhen ArchForce Financial Technology Co., Ltd.	2022/2021/2020
 <b>WeLab</b>	WeLab Group	2022/2021/2020/2019/2018/ 2017/2016
 <b>AHI Fintech</b>	Hui'an Jinke (Beijing) Technology Co., Ltd.	2022/2020/2019
 <b>FOFUND</b>	Fofund Co., Ltd.	2022/2021/2020

# 2022 China Leading Fintech 50 and Emerging 50 — Leading Enterprises List



Short name of enterprise	Full name of enterprise	Years in which the enterprise was shortlisted
➤ Value Online	Shenzhen Value Online Information Technology Co., Ltd.	2022/2021/2020/2019
➤ JFZ	Shenzhen Golden Axe Network Technology Co., Ltd.	2022/2021/2020/2019/2018/2017/2016
➤ OneConnect	OneConnect Financial Technology Co., Ltd.	2022/2021/2020/2019/2018
➤ Kingstar Fintech	Shanghai Kingstar Fintech Co., Ltd.	2022/2020
➤ Kingdom Technology	Shenzhen Kingdom Sci-tech Co., Ltd.	2022/2021
➤ KINGSWARE	Zhuhai Kingsware Infotech Co., Ltd.	2022/2021/2020
➤ Kafang	Shanghai Kayang Information System Co., Ltd.	2022/2020
➤ KTM Tech	Kaitaiming Technology (Beijing) Co., Ltd.	2022/2021/2020
➤ Airwallex	Airwallex	2022/2021/2020/2019
➤ Linklogis	Linklogis Inc.	2022/2021/2020/2019
➤ IdeaCome	Ideacome Technology Co., Ltd.	2022/2021/2020/2016
➤ Lufax Holding	Shanghai Lujiazui International Financial Asset Exchange Co., Ltd.	2022/2021/2020/2019/2018/2017/2016
➤ MSXF	Mashang Consumer Finance Co., Ltd.	2022/2021/2020/2019/2018/2017/2016


# 2022 China Leading Fintech 50 and Emerging 50 — Leading Enterprises List



Short name of  
enterprise

Full name of enterprise

Years in which the  
enterprise was shortlisted

 <b>MioTech</b>	MioTech	2022/2021/2020/2019/2018
 <b>NewBanker</b>	Beijing Niutoubang Technology & Consulting Co., Ltd.	2022/2021/2020
 <b>PingAn E-wallet</b>	Ping An e-Wallet e-Commerce Co., Ltd.	2022/2021/2020/2019
 <b>GLP FinTech</b>	GLP Financial Holding (Chongqing) Co., Ltd.	2022/2021/2020
 <b>Samoyed Cloud</b>	Samoyed Cloud Technology Group Holdings Limited	2022/2021/2020/2017
 <b>DCITS</b>	Digital China Information Service Company Ltd.	2022/2021/2020
 <b>Shouqianba</b>	Shanghai Shouqianba Internet Technology Co., Ltd.	2022/2020
 <b>ChinaScope</b>	ChinaScope (Shanghai) Company	2022/2021/2018/2017/2016
 <b>Sichuan XW Bank</b>	Sichuan XW BankCo., Ltd.	2022/2021/2020/2019
 <b>Tianchuang Credit</b>	Tianchuang Credit Co., Ltd.	2022/2018/2017/2016
 <b>Datayes!</b>	Datayes Inc.	2022/2021/2020/2019/2018/ 2017
 <b>Wanxiang Blockchain</b>	Shanghai Wanxiang Blockchain Inc.	2022/2021/2020/2019
 <b>VBAO</b>	Beijing Chinavbao Technology Co., Ltd.	2022/2021

# 2022 China Leading Fintech 50 and Emerging 50 — Leading Enterprises List

 Short name of enterprise	 Full name of enterprise	 Years in which the enterprise was shortlisted
 <b>WeBank</b>	WeBank Co., Ltd.	2022/2021/2020/2019/2018/2017/2016
 <b>XWFintech</b>	Chengdu XW Fintech Co., Ltd.	2022/2021/2020
 <b>XYSL</b>	XYSL	2022/2021/2020/2019/2018
 <b>Nebular Digital</b>	Nanjing Nebular Digital Technology Co., Ltd.	2022/2021/2020/2019/2018
 <b>SUNRATE</b>	Sunrate Solutions Limited	2022/2021/2020/2019/2018
 <b>China UMS</b>	China UnionPay Merchant Services Co., Ltd.	2022/2021/2020
 <b>Yingmi Fund</b>	Zhuhai Yingmi Fund Service Co., Ltd.	2022/2021/2020/2019
 <b>CSCC</b>	Zhongqiyunlian (Beijing) Financial Information Service Co., Ltd.	2022/2021
 <b>CSCI</b>	China Securities Credit Investment Co., Ltd.	2022/2021/2020/2019
 <b>ZhongAn Online P&amp;C nsurance</b>	ZhongAn Online P&C Insurance Co., Ltd.	2022/2021/2020/2019/2018/2017/2016
 <b>PeerSafe</b>	Beijing PeerSafe Technology Co., Ltd.	2022/2021/2020/2019

# 2022 China Leading Fintech 50 and Emerging 50 — Emerging Enterprises List

		
Short name of enterprise	Full name of enterprise	Years in which the enterprise was shortlisted
 <b>Baige Online</b>	Baigebao (Xiamen) Insurance Brokers	2022/2021
 <b>Bangnitou</b>	Vanguard Investment Advisors (Shanghai) Investment Consultancy Co., Ltd.	2022/2021
 <b>Bicai Group</b>	Bicai Data Technology Group	2022/2021
 <b>Credit-X</b>	Beijing Chexiao Technology Co., Ltd.	2022
 <b>DAOKOU FINTECH</b>	Beijing Daokou Jinke Technology Co., Ltd.	2022/2021/2020
 <b>Dongan Technology</b>	Zhejiang Dongan Technology Co., Ltd.	2022/2021
 <b>InsightOne</b>	Insightone Tech Co., Ltd.	2022/2021
 <b>Dowsure</b>	Dowsure Technology	2022
 <b>Dooffe TECH</b>	Jiangsu Duofei Network Technology Co., Ltd.	2022
 <b>Finogeeks</b>	Shenzhen Fantai Geek Technology Co., Ltd.	2022
 <b>Secidea</b>	Shenzhen Secidea Network Security Technology Co., Ltd.	2022
 <b>JDH</b>	Jiandanhui Information Technology (Guangzhou) Co., Ltd.	2022
 <b>SinoVoice</b>	Beijing SinoVoice Technology Co., Ltd.	2022



# 2022 China Leading Fintech 50 and Emerging 50

## Emerging Enterprises List



Short name of  
enterprise

Full name of enterprise

Years in which the  
enterprise was shortlisted

 SequoiaDB	Guangzhou Sequoia Software Development Co., Ltd.	2022/2021
 Kaixin Technology	Kaixin Financial Technology Co., Ltd.	2022/2021/2020
 KEYIKE	Shenzhen Keyike Information Technology Co., Ltd.	2022
 Qutke	Qutke Technology (Beijing) Co., Ltd.	2022
 LeChain Cloud	Shenzhen Xiaobu Runpao Technology Co., Ltd.	2022/2021
 Lewei Sichuan	Sichuan Lewei Technology Co., Ltd.	2022
 LICAIMOFANG	Beijing Koudai Caifu Information Technology Ltd.	2022/2021/2020
 Fintopia	Fintopia Group	2022
 Ling Shu Tech	NengLian Tech Ltd.	2022/2021
 Magic Engine	Magic Engine	2022
 ZechFin	Shenzhen Qianhai Zejin Internet Financial Services Co., Ltd.	2022
 Qinjia Technology	Qinjia Network Technology (Beijing) Co., Ltd.	2022
 Hyperchain	Hangzhou Hyperchain Technology Co., Ltd.	2022/2020


# 2022 China Leading Fintech 50 and Emerging 50 — Emerging Enterprises List



Short name of  
enterprise

Full name of enterprise

Years in which the  
enterprise was shortlisted

 <b>Rxhui</b>	Beijing Ronghui Jinxin Information Technology Co., Ltd.	2022
 <b>RealAI</b>	Beijing RealAI Intelligent Technology Co., Ltd.	2022
 <b>Sanyue Technology</b>	Beijing Youpin Sanyue Technology Development Co., Ltd.	2022
 <b>CoralGlobal</b>	Hangzhou Mumin Network Technology Co., Ltd.	2022
 <b>Shenghe Technology</b>	Shanghai Sohertz Zhiyuan Technology Group Co., Ltd.	2022
 <b>Shengli Technology</b>	Shengli Anyuan Technology (Hangzhou) Co., Ltd.	2022
 <b>DC Public Service</b>	Shujin Public Service (Qingdao) Co., Ltd.	2022/2021
 <b>TDFT</b>	Tiandao Fintech Co., Ltd.	2022/2021/2020
 <b>Tianjin Kincheng Bank</b>	Kincheng Bank of Tianjin Co., Ltd.	2022
 <b>TTD</b>	Sichuan Totodi Technology Co., Ltd.	2022/2021
 <b>Wiseweb</b>	Wise Web Technology Group Co., Ltd.	2022
 <b>Weiyan Tech</b>	Shenzhen Weiyan Technology Co., Ltd.	2022/2021/2020
 <b>XUNCETECH</b>	Shenzhen Xunce Technology Limited	2022/2021/2020

# 2022 China Leading Fintech 50 and Emerging 50 — Emerging Enterprises List



Short name of  
enterprise

Full name of enterprise

Years in which the  
enterprise was shortlisted

 <b>AsialInfo Security</b>	AsialInfo Security Technologies Co., Ltd.	2022
 <b>Eyecool</b>	Beijing Eyecool Technology Co., Ltd.	2022
 <b>EasyTransfer</b>	Beijing Easy Transfer Commercial Service Co., Ltd.	2022
 <b>Yinzhe Technology</b>	Yinzhe Technology (Guangzhou) Co., Ltd.	2022
 <b>Yuanbao Technology</b>	Beijing Yuanbao Technology Co., Ltd.	2022/2021
 <b>SME CREDIT</b>	Zhejiang Zhelixin Credit Investigation Co., Ltd.	2022/2021
 <b>Knowledge-Vision</b>	Chengdu Knowledge Vision Technology Co., Ltd.	2022/2021
 <b>ZIGGURAT</b>	Xi'an Zhigui Internet Technology Co., Ltd.	2022
 <b>HashSTACS</b>	Chengdu HashSTACS Technology Co., Ltd.	2022/2021
 <b>Smart Star Chain</b>	Zhihui Xinglian (Xiamen) Digital Technology Co., Ltd.	2022
 <b>BOC FINTECH</b>	Bank of China Financial Technology Co., Ltd.	2022

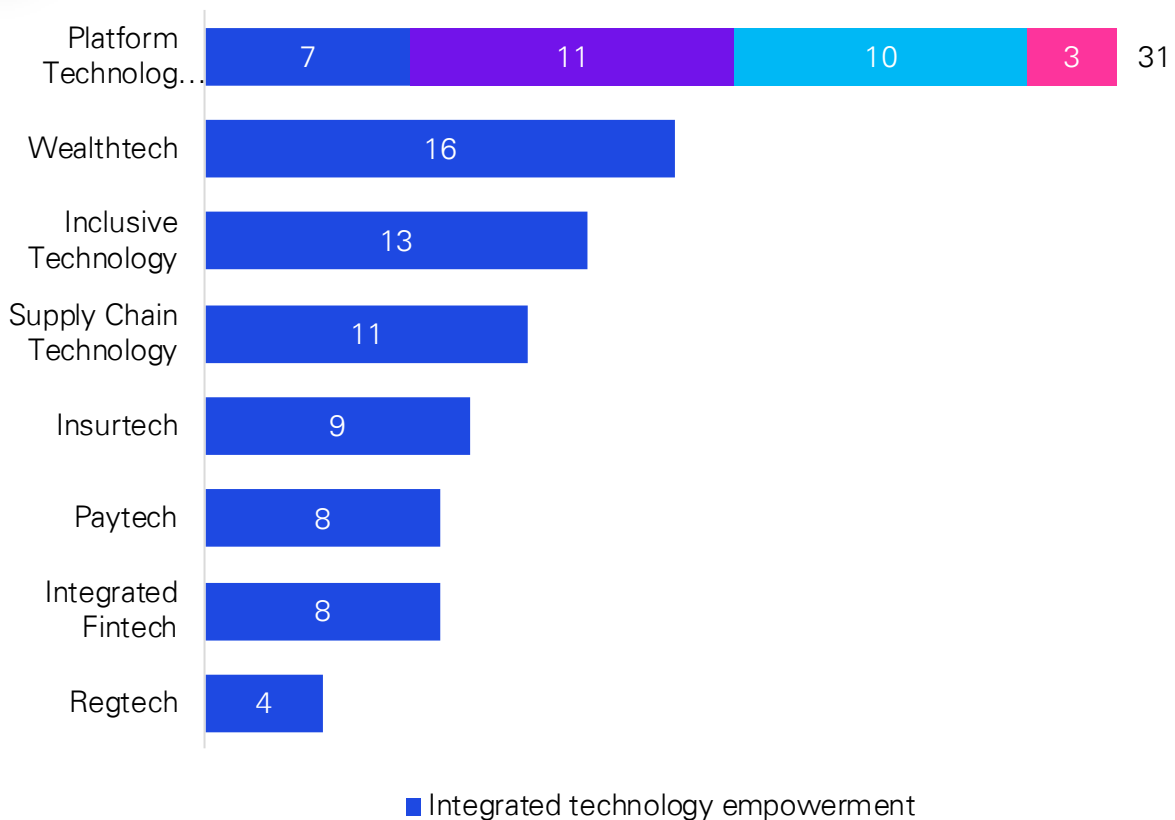
# Overview

**01** Distribution of expertise areas: Platform Technology Empowerment, Wealthtech and Inclusive Technology were the top three categories, highlighting the role of big data, AI and blockchain as leading infrastructure technologies

In terms of the selected companies' expertise areas, Platform Technology Empowerment and Wealthtech enterprises ranked first and second in 2022, which were the same rankings we saw in 2021. They accounted for 31 percent and 16 percent of the selected companies respectively. On the heels of these categories, Inclusive Technology came in third, accounting for 13 percent of the selected companies. Finally, Supply Chain Technology, Insurtech, Paytech, Integrated Fintech and Regtech ranked fourth to eighth respectively.

In order to highlight the technology-based nature of fintech development, in 2022, we again divided the Platform Technology Empowerment segment into four sub-segments: Integrated Technology Empowerment; Big Data and AI; Blockchain, Privacy Computing and Security; and Distributed Computing, Cloud Computing and Hardware Acceleration. Within the Platform Technology Empowerment segment, the sub-segments of Big Data and AI; and Blockchain, Privacy Computing and Security ranked first and second, which were the same rankings as in 2021. They accounted for 11 percent and 10 percent of the selected companies respectively. Once again, the rankings continue to highlight the role of big data, AI and blockchain as leading infrastructure technologies.

**Distribution of expertise areas**



Source: KPMG analysis

# Overview

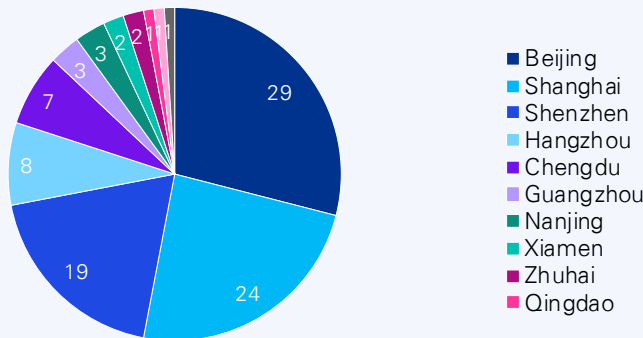
02

**City and regional distribution: Beijing, Shanghai and Shenzhen remain at the top of the list, with the Yangtze River Delta, Guangdong-Hong Kong-Macao and Beijing-Tianjin-Hebei regions demonstrating a strong clustering effect**

Similar to 2021, Beijing, Shanghai and Shenzhen are home to most of the selected companies, accounting for 29 percent, 24 percent and 19 percent of the selected companies respectively. Two more companies from Beijing were selected this year compared to last year. In a notable difference from 2021, the selected companies in 2022 were more widely distributed. Enterprises in Xiamen, Zhuhai, Tianjin and Qingdao were also shortlisted, in addition to those from emerging fintech cities like Hangzhou, Chengdu, Nanjing and Guangzhou. This change reflects the transition China is making from reinforcing the pillars and framework of fintech towards harnessing growth momentum across the country.

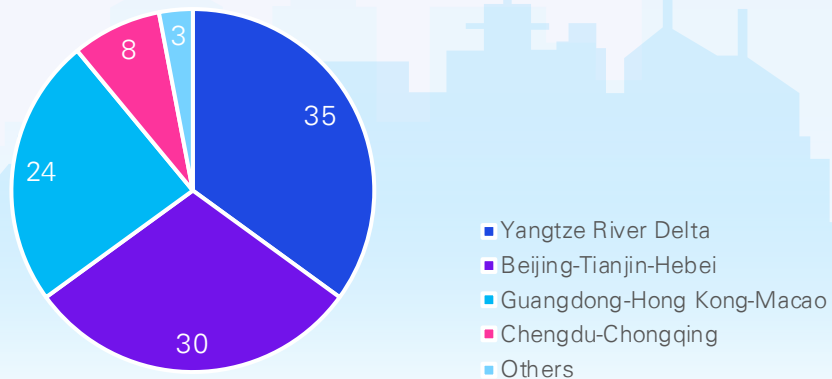
Geographically, almost all enterprises are located in the top five city clusters earmarked for prioritised development in the 14th Five-Year Plan. Overall, 89 percent of the selected companies are located in the Yangtze River Delta, Guangdong-Hong Kong-Macao Greater Bay Area, and Beijing-Tianjin-Hebei city clusters.

## Individual Cities



Source: KPMG analysis

## Urban Clusters



Source: KPMG analysis



# Overview

03

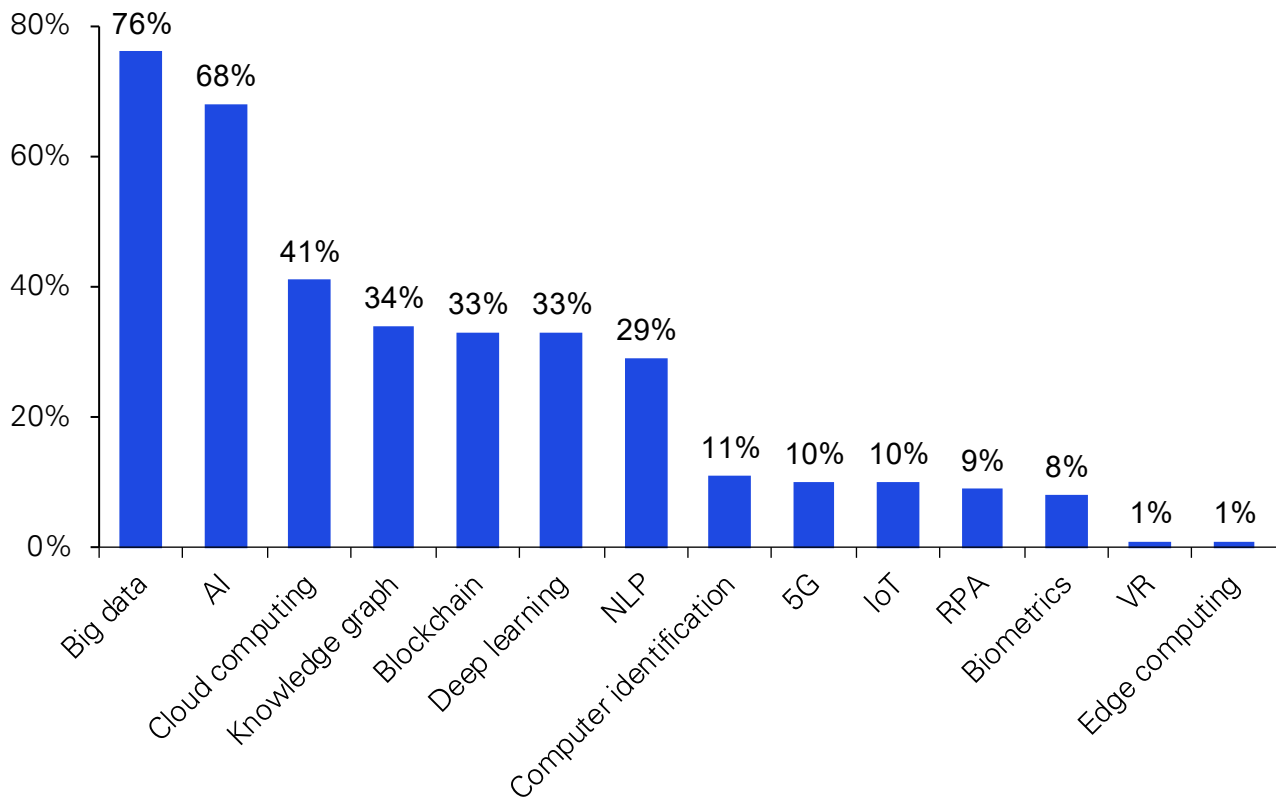
**Distribution of core technologies: The core ABCD technologies are steadily maturing, and emerging technologies such as VR are booming**

The ABCD technologies are still the core financial technologies. In 2022, the percentage of companies that cited knowledge graphs as a core technology rose to 34 percent, overtaking blockchain for the 4th place spot for the first time, followed by both deep learning and blockchain at 33 percent, tied for 5th place. These changes show that while fintech enterprises are still based on the ABCD technologies, they are actively exploring other capabilities in their quest to more deeply integrate technologies and financial scenarios.

The potential of the metaverse has been gaining recognition as companies in this space continue to make progress in basic research, technological innovation and scenario development. Meanwhile, fintech enterprises have also begun actively deploying technologies such as VR and edge computing.



Distribution of core technologies



Source: KPMG analysis

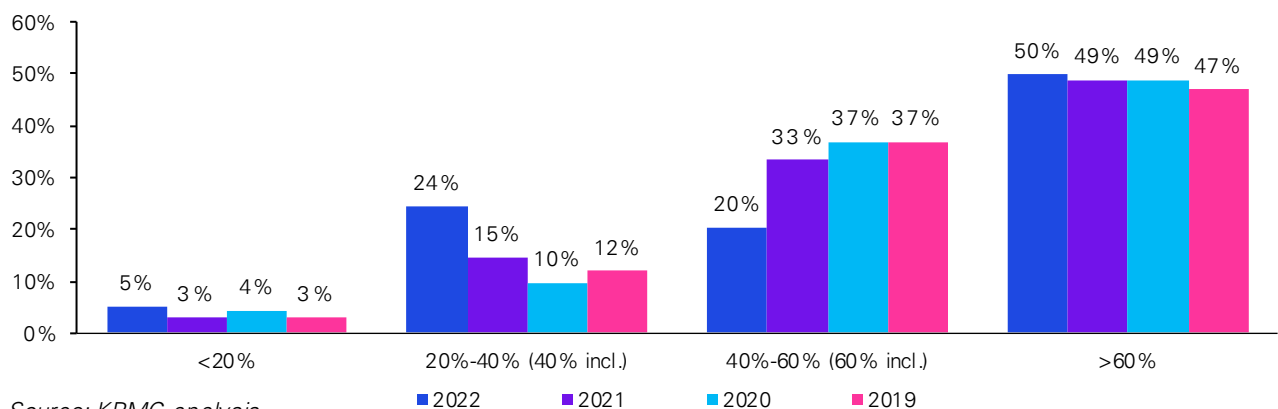
# Overview

## 04

### Proportion of technical personnel: Half of the selected enterprises had more than 60 percent fintech personnel

Percentage of technical personnel has become a key indicator for measuring the innovative capability of a fintech enterprise, and the number of selected enterprises that employed more than 60 percent fintech personnel grew in 2022. Specifically, half of the selected enterprises in 2022 had more than 60 percent technical personnel, underlining the trend of technology-driven fintech development.

Proportion of technical personnel



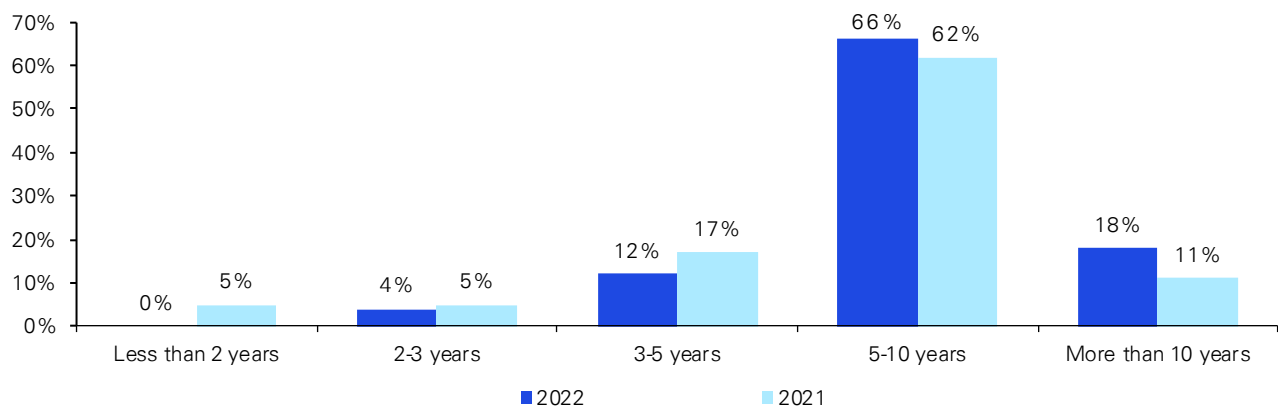
Source: KPMG analysis

## 05

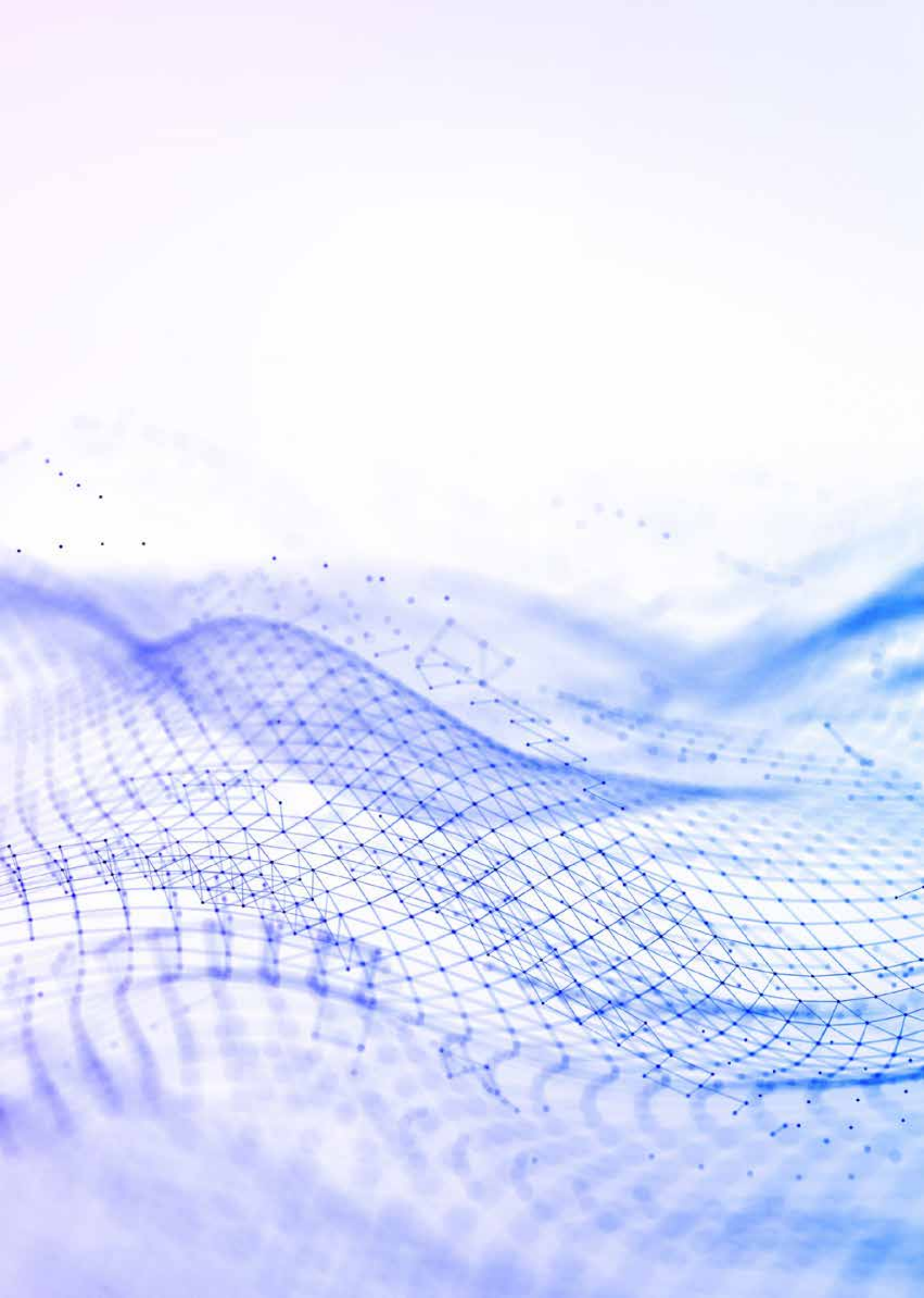
### Distribution of years since establishment: Over 80 percent of the selected enterprises have been established for more than 5 years, showing that mature enterprises are being rewarded for their years of hard work

After years of development, many leading fintech enterprises have positioned themselves as intermediaries serving both the financial sector and the real economy. In terms of years since establishment, 84 percent of the selected enterprises have been established for more than 5 years, and 18 percent have been established for more than a decade. These figures increased by 11 and 7 percentage points respectively compared with 2021.

Distribution of years since establishment



Source: KPMG analysis





# Trends and Prospects



# 2023 Fintech Trends



## Laying a solid institutional foundation for the long-term, stable development of the sector

Since the end of 2021, a number of policies have been introduced for the fintech sector, including the *Fintech Development Plan (2022-2025)* (the “Plan”), the *Guiding Opinions on the Digital Transformation of the Banking and Insurance Industries*, and the *14th Five-Year Plan for the Technological Development of the Securities and Futures Industries*. These policies reflect on the results that have been achieved over the last five years in reinforcing the foundation and framework of fintech, while also serving as a rallying call for the market to embark on a new stage of fintech development. As suggested in the Plan, technology-empowered financial resources should be precisely allocated to key areas and weaker aspects of economic and social development, so that the financial sector can better serve the real economy. Digitalised, fintech-based financial infrastructure is an indispensable part of “new infrastructure”; and the stronger it is, the smoother and more efficient the financial system runs as a whole and the more reasonable financial resources are allocated.

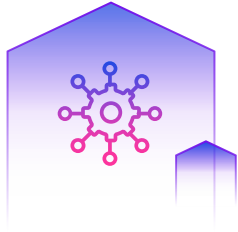
The new information technologies, particularly the ABCD technologies, have been proven effective after years of trials and testing. The stable development of mature technologies is empowering financial data centres and computing power centres and opening up comprehensive financial scenarios. In general, technology is causing the financial sector to shift from “model innovation” towards “technological innovation,” while also laying a solid foundation for financial infrastructure.

Financial enterprises are becoming more open and responsive as they pursue their digital transformations, but risks in business, technology, data, networks and other areas are emerging alongside these changes. Digitalisation is accelerating the upgrading of financial products and services, but it is also resulting in new financial risks that pose challenges to traditional regulatory policies and tools. In 2022, China introduced a number of high-level financial and data regulations to lay a more robust institutional foundation for the financial system. Specifically, in October, the People’s Bank of China issued the *Guidelines for Science and Technology Ethics in the Financial Sector*, which provides policy guidance in response to ethical issues related to the digital divide, technological exclusion, algorithmic discrimination, privacy violations and other challenges. In December, the State Council issued the *Opinions on Establishing an Institutional Foundation to Better Maximise the Role of Data Elements* (the “20 Data Measures”), which is the first issuance to describe the basic rules for data and specify principles and guidelines for handling data property rights, data circulation, data transactions, data use, data distribution, data governance and data security. Data is widely circulated in the financial sector, and the 20 Data Measures clearly specify how data property rights, data circulation, data transactions, and income distribution should be handled.

Institutions are just as important as technology when it comes to forming a solid foundation for the long-term development of the fintech sector, especially in view of the dual role played by institutions as both a motivator and constraint. In recent years, the development of legal frameworks, regulations, industry standards and self-disciplinary rules have accelerated the formation of a multi-layered system of fintech rules and regulations.



# 2023 Fintech Segment Trends



## Integrated Fintech Segment

As an important tool for fusing the digital economy and real economy, integrated technologies are being used to access diversified scenarios and customer groups and drive digital transformation

The report to the 20th National Congress of the Communist Party of China stresses the development of the digital economy as the key to a modern industrial system and high-quality development. The report envisions a future in which China will “accelerate the development of the digital economy, integrate the digital economy with the real economy, and build internationally competitive digital industry clusters.” Finance is the lifeblood of the economy. Going forward, enterprises need to determine how to develop fintech so that it can be used to integrate the digital economy and the real economy and empower the transformation of traditional industries.

After years of rapid fintech development, many technologically innovative financial enterprises are operating in the marketplace. These enterprises know how to leverage their technological advantages and financial expertise to access financial scenarios and target customer groups, and they are lending their fintech capabilities to traditional financial institutions to empower their digital transformations. In this way, they are helping integrate the digital economy and real economy and fulfilling their mission to serve the real economy.

## Using integrated technologies to target diversified scenarios and customer groups



In the past, technologies were usually applied in single scenarios or at a single point. Today, fintech enterprises are applying packages of technologies to address complex and diversified scenarios and help financial institutions scale challenges during their digital transformations. After years of trials and testing, core technologies such as big data and AI are stable and mature, and they are serving as the launch point for enterprises to access diversified financial scenarios. Currently, multiple pain points exist in green finance. For example, financial institutions face challenges in capturing front-end green data; identifying, certifying and labelling green assets; exercising risk control over green assets; and disclosing environmental information. Fortunately, fintech provides an effective solution to these challenges. For instance, enterprises can use technologies such as big data to address difficulties in handling data and information, and blockchain technology can be used to ensure that the underlying green data of assets is traceable and immutable.

# 2023 Fintech Segment Trends

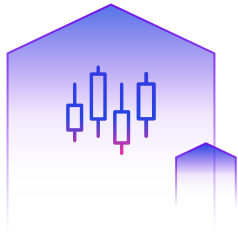
In recent years, opportunities in terms of new customer groups have been emerging from the development of the silver economy and pension fund financing as China's population ages. Fintech not only plays a role in empowering the silver economy and pension fund financing, but also in ensuring that "long tail" customers such as the elderly are included in a digitalised community. Mitigating the "digital divide" is an issue that is drawing the attention of both policy makers and market participants. Currently, fintech enterprises are designing elderly-oriented electronics and software, including senior-friendly mobile banking capabilities, in an effort to tap this market. In addition, infrastructure that supports the digital economy, including 5G, AI, and mobile Internet, is being improved in rural areas, and the rural financial service system is being strengthened. As a result, rural financial services are becoming increasingly digitalised, and future-oriented financial institutions are precisely identifying target customers in these areas. For example, farmers in China commonly face issues related to the slow-moving nature of agricultural products because they lack information about the relationship between the market and price fluctuations. To address these challenges, financial institutions can provide market forecasts, agricultural product insurance and small loans to farmers. In this way, financial institutions can serve the "agricultural industry, rural areas and farmers" and add new momentum to rural revitalisation.

## Leveraging fintech capabilities to support the digital transformation of industries



In recent years, innovative fintech enterprises have leveraged ongoing investment and diversified business scenarios to drive the development of core financial technologies, and they are now well-positioned to use their fintech capabilities to support the digital transformation of the traditional financial sector. Small and medium-sized financial institutions are relatively weak in terms of their technology and risk control capabilities. However, regulators are urging them to fulfil their responsibilities as loan providers and avoid "credit management without substance." Against this backdrop, they can now engage third-party fintech service providers to establish smart systems to combat money laundering, manage credit and control risks. Innovative fintech enterprises are also lending their technological capabilities to other industries. For example, technologies such as Internet of things (IoT), blockchain, and satellite remote sensing are being used in the agricultural industry to capture and intelligently analyse data. Enterprises are also using the ABCD technologies to empower intelligent education and build "eCampuses."

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## Platform technology empowerment segment

Led by the power of technology, synergies between technology and finance are modernising the financial sector in China

With the deepening digital transformation of the industry, technology and finance are becoming increasingly inseparable. As more and more financial institutions shift technology from a “supporting” role to an “empowering” one, a handful of highly capable fintech enterprises with top-notch technical capabilities and service quality are expected to emerge in the market. They will focus on the new generation of ABCD technologies as their core competence, while also exploring emerging technologies such as quantum computing, digital twins, virtual reality/augmented reality (VR/AR), virtual humans, network connections and biological probes. These leading companies will no longer be satisfied with only deploying simple tools for their customers in the financial sector — instead, they will provide comprehensive support across the entire industry chain and enterprise lifecycle, covering all business processes and data dimensions.

### Sub-segment 1: Integrated technology empowerment

The deep integration of technology scenarios is driving financial IT innovation



As technology continues to penetrate into core areas of finance, fintech enterprises are endeavouring to meet the needs of customers while also strengthening their core technical capabilities, intensively exploring different application scenarios, accumulating reusable solutions and rapidly expanding their business. As IT innovation moves into the fast lane, these enterprises are expected to harness their integrated technical capabilities to promote the high-quality development of the financial sector.



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Additional cutting-edge technological breakthroughs are needed to lead financial IT innovation



The financial sector has reached a general consensus on promoting financial IT innovation, which has accelerated breakthroughs on the supply side of technologies. The financial sector is the major area for IT innovation, which is closely linked to the security and control of the country's overall financial system, and it also provides a rich foundation for R&D and the application of cutting-edge technologies. China should increase the use of domestically-made technologies and catch up with international standards, both in terms of basic software and hardware such as operating systems, databases, middleware and hardware acceleration, as well as in emerging technologies such as quantum computing and the metaverse. It is important to note that as IT innovation in the financial sector involves the overall IT architecture, explosive growth is expected to be seen in the demand for items from underlying architecture to cloud computing and data storage services, as well as for the replacement and upgrading of core systems and peripheral products. As many players will work together to build the financial sector's IT innovation ecosystem, integrated technology suppliers that focus on leading infrastructure technology and that possess core scenario application advantages are expected to lead the construction of the ecosystem and actively promote the innovation and exploration of more cutting-edge technologies.

The technology multiplier effect is rapidly expanding the use of scenario-based best practices



With the development of the digital economy, enterprises are exploring on how to leverage fintech to promote the digital transformation of the financial sector and assist financial institutions in better serving the real economy. As technology suppliers continue to strengthen their core technical capabilities, different digital technologies are becoming more deeply integrated, resulting in a robust multiplier effect. The evolution and integration of infrastructure technologies will ultimately expand applications in upper-layer scenarios. In terms of promoting the digital transformation of financial institutions, the distributed transformation of underlying infrastructure has become a major trend. In this area, technology suppliers are focusing on issues such as smooth data migration, security compliance and compatibility adaptation to ensure that distributed transformation will not affect business continuity. In addition, they are building capability modules that are standardised and componentised to improve the breadth and flexibility of upper-layer applications. From the perspective of empowering financial institutions to serve the real economy, fintech has given way to the emergence of new business models such as "open banking," whereby financial services are gradually embedded into different aspects of business and real life scenarios. At the same time, fintech capabilities are also being extended across the entire industry chain and ecosystem of the financial sector. As a result, demand in key scenarios such as green finance, smart cities and supply chain finance will continue to grow. To uncover business opportunities, fintech enterprises are actively identifying customers' pain points and adopting the development strategy of "focus first, then expand" to cultivate best practices. Under this model, they are focusing on specific scenarios, and then relying on product standardisation to expand their business.



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## Sub-segment 2: Big data and AI

### Activating the value of data elements to make data intelligence accessible to all



At the end of 2022, China issued the 20 Data Measures to emphasise the importance of building a basic system for data that covers data property rights, circulation and transaction of data elements, income distribution and security governance. The 20 Data Measures are designed to promote data compliance and the efficient circulation and usage of data in order to empower the development of the real economy. Based on the massive scale of the country's data and rich application scenarios, the Measures aim to fully tap the value of data elements and give the entire population access to the benefits brought about by the digital economy. In the financial sector, enterprises are rapidly realising the value of data. The sector has accumulated a large number of full-link data resources, enabling enterprises to become pioneers in exploring and improving the basic system for data, and innovating the technological path and development model.

### Strengthening data lifecycle management and exploring the potential of data elements



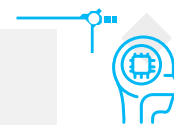
Data lifecycle management should be strengthened to make data more usable and user-friendly. Specifically, in the data collection stage, IoT devices and applications should be widely used to collect data in real time across different terminals in order to effectively break down data silos and accumulate diverse, high-quality data resources. In the data integration stage, the gradual integration of traditional relational databases with data streams and batches, data lakes and warehouses, and overall data governance; the deep integration of AI capabilities; and the transformation of self-service big data analysis and mining architecture are equipping enterprises with centralised control over structured, semi-structured and unstructured data and enabling them to construct a shared, open database. In the data processing stage, the industry and its enterprises are steadily clarifying their internal data standards, and technological advancements are being seen in areas such as data extraction, data cleaning, data verification and data conversion. As a result, enterprises are now better equipped to interpret data. Finally, in the data application stage, employing a data-driven approach has become a "must" across the industry, which is resulting in improvements in the productivity structure of the digital economy as a whole.

From the perspective of the overall industry and the development of the digital economy, unlocking the potential of data elements also means that data circulation and transactions will occur across different levels, industries and regions. In this respect, financial institutions and fintech enterprises need to not only strengthen their enterprise-level data management capabilities, but also continue to cultivate ecosystem-level data management capabilities and promote the mining of data value on a larger scale at a higher level.



# 2023 Fintech Segment Trends

“Simple, explainable, engineered, secured and trustable” have become the standards for the new generation of AI infrastructure



AI algorithms enable data-driven thinking and decision-making, and provide an effective tool for making good use of data and conquering the “last mile” of data value. It is important to note that in an open source environment, risks are arising from the convergence of algorithms, and approaches that simply leverage a handful of data to train deep learning models are unable to meet competitive demands. As a result, enterprises are increasingly focusing on improving their algorithms’ accuracy and iteration efficiency in an effort to develop explainable, intervenable and simplified AI decision-making platforms. In addition, they have also started to build AI security attack and defence systems using next-generation AI technologies that are secure, trustworthy and reliable, with the goal of ensuring the stable operation of their algorithms in a confrontational environment. On the one hand, to obtain in-depth insights into the operational processes and pain points of the financial industry, enterprises are fully integrating industry know-how into their algorithmic models to improve the accuracy of their algorithms and data analysis. On the other hand, as data sources improve and data dimensions expand, enterprises are fundamentally improving their algorithms’ quality and iteration efficiency, seizing first-mover advantages, and lowering the threshold for the use of AI algorithms. In this way, they are establishing end-to-end, explainable, traceable and business-oriented AI services that cover the entire process of “data, models, application, optimisation and governance.” As the quantity, quality and efficiency of AI algorithms improve, the results of intelligent data analysis are expected to shift from mainly supporting business intelligence (BI) scenarios to AI scenarios, giving way to a new generation of AI infrastructure supported by technologies such as deep learning, explainable machine learning, AI security attack and defence, and knowledge graphs.



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Delivering value to customers by adopting data-driven business operations intelligence and business process intelligence



Improving employees' ability to access the value of data is essential not only for delivering value based on customer needs but also for transmitting data value to the end users of data in the financial sector and establishing a closed-loop system that promotes data value. Currently, financial institutions are facing issues related to low participation of business staff in data processing and application, and significant numbers of IT professionals are required to both perform technical development tasks and obtain an understanding of the underlying business logic, resulting in a potential misallocation of resources. One of the major solutions to address this issue is to continuously promote data intelligence for everyone in the enterprise, and fully ensure that front-line business staff can conveniently access technical products during actual business operations. By taking these steps, enterprises can reduce their reliance on IT staff, optimise their human resource structure and raise overall work efficiency. For example, in respect of business operations intelligence, technologies such as low-code platforms and robotic process automation + natural language processing (RPA+NLP) can be used to empower business staff with an end-to-end, user-friendly, automated operational experience. Meanwhile, in terms of business process intelligence, enterprises are using knowledge maps, data maps, intelligent text processing, biometrics (such as iris recognition, voiceprint recognition and vein recognition) and multi-modal interactive robots to facilitate collaboration between digital staff and operational staff, thereby improving their work efficiency and providing end users with an efficient, intelligent service experience.



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## Sub-segment 3: Blockchain, privacy computing and security

### Promoting assetisation of data elements and building a comprehensive line of defence



The value of data elements is not only reflected in their use value to the enterprise, but also in their exchange value in the marketplace. Therefore, the assetisation of data elements is an inevitable aspect of China's effort to build a data elements market.

### Strengthening blockchain infrastructure, and using blockchain platforms to enable low-cost trust



"New infrastructure" is the strategic cornerstone and driving force behind the digital economy, and blockchain is an important part of "new infrastructure." Its core value lies in its ability to enable distributed trust, which can effectively solve information asymmetry issues between different parties in a financial system, and therefore it enjoys broad application prospects. As China continues to promote the construction of blockchain infrastructure, national projects such as "Xinghuo Space" and the Blockchain-based Service Network (BSN) are paving the way for blockchain technology to be applied across many financial scenarios, which will result in significant advances in the openness, sharing and trading of financial data. One major path for the adoption of blockchain in the financial sector is for relevant platforms to be established. In this context, the government should direct blockchain construction and standardise its development to enhance consensus among all parties and enable low-cost trust. These conditions will then lead to the emergence of a number of new business models in areas such as green finance, supply chain finance, financial supervision, and digital RMB business.

### In the face of stringent supervision, privacy computing provides the foundation for technical capabilities



With the issuance of privacy protection laws and regulations such as the *Network Security Law*, the *Data Security Law*, and the *Personal Information Protection Law*, as well as heightening scrutiny from financial regulators, privacy computing has become a "must have" in the financial sector due to its ability to balance data security and data application. In general, privacy computing is still at a single-point application stage covering two scenarios: risk control and marketing. To allow for large-scale application, enterprises need to improve their privacy computing capabilities, promote the integration and innovation of software and hardware, and strengthen the scalability and supervision of technical architecture. Going forward, privacy computing is expected to continue to promote the security and circulation of data elements in the financial sector and boost the integration of data ecosystems across departments, industries and regions, ultimately becoming another major fintech infrastructure technology that facilitates the development of the financial sector.



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## Focusing on the risks of cutting-edge technologies amid prominent security challenges



At present, financial information systems with large-scale infrastructure and a large number of data nodes are increasingly being developed. The security challenges they are facing are becoming more complex, and mainly come in two types: cyber attacks and technology application risks. In respect of cyber attacks, strengthening risk prevention in the financial system has become a common focus across the sector, and financial information security in particular has become important for the high-quality development of the financial sector, pushing enterprises to introduce technical concepts such as chaos engineering and zero trust architecture, and strengthen multi-dimensional security governance capabilities in areas such as information, data and networks. On the other hand, technology application risks are more subtle and uncontrollable, and may include problems such as deficiencies in the cross-chain mutual trust mechanism for blockchain, weaknesses in the performance and accuracy of privacy computing platforms, and inadequacies in the interpretability of AI models and AI attack-defence technologies. As the financial industry and its regulators direct more attention to the risks of cutting-edge technologies, we expect to see these risks driving more technological innovation in the coming years.



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## Sub-segment 4: Distributed computing, cloud computing and hardware acceleration

### Advances in computing power are enabling digital acceleration engines



Computing power is one of the core productive forces driving the development of the digital economy. As the leading industry in digital transformation, the financial sector needs computing power that “continuously evolves.” As advancements in hardware accelerate innovation and breakthroughs in technical solutions, distributed technology and financial cloud computing, efficient, flexible and intelligent computing services are emerging that meet the requirements of different scenarios and enable businesses to reduce costs and increase efficiency.

### Edge computing is complex and diverse, and hardware acceleration solutions are breaking performance bottlenecks



Transaction volumes, data volumes and peak value per second are growing exponentially across financial business scenarios, and the demand for edge computing has exploded while also becoming more complex and diverse. Against this backdrop, computing services for the financial sector have entered a critical period of innovation. Traditional computing solutions that use a central processing unit (CPU) as a general-purpose server cannot fully meet the financial sector’s needs, and dedicated chips are required to obtain the necessary flexible computing power in certain scenarios. Innovation in the industry is currently trending in the direction of heterogeneous computing, and this technology is mainly being applied in the financial industry to develop hardware acceleration solutions that use field programmable gate array (FPGA) chips. These chips optimise computing performance, and offer outstanding advantages in processing real-time requests from users and in computing in small quantities and large batches. FPGA chips have been piloted in specific scenarios, such as in the high-speed brokerage market quotation system and brokerage order system, to improve the efficiency of trading business. With the support of technologies such as high-performance computing and edge computing, the computing power of the financial sector is steadily evolving and growing more diverse. However, the industry still needs to develop more widely-recognised integrated solutions that meet the needs of enterprises across different scenarios in order to fully tap the value of computing innovation.

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## Optimising IT resources by moving from centralised architecture to converged distributed architecture



Distributed architecture stresses multi-node deployment and aligns resources based on actual demand, which greatly optimises the allocation of IT resources. At the national level, the “Eastern Data, Western Computing” (东数西算) initiative, which is now in the construction phase, will promote computing power connectivity, remote computing and collaborative networks, and provide crucial support for the implementation of distributed computing in many key sectors of the national economy, including the financial sector. Under centralised architecture, single point of failure risk can affect business continuity. Distributed architecture possesses a single-point “self-healing” function and can flexibly allocate resources, which helps ensure the financial system’s ability to provide continuous and stable services. Going forward, the financial sector’s IT architecture will gradually evolve towards an organic integration of the centralised model and distributed model. It is important to note that as computing nodes increase and become more decentralised, the risk of system exposure will also increase, and the industry will need to focus on distributed security protection solutions.

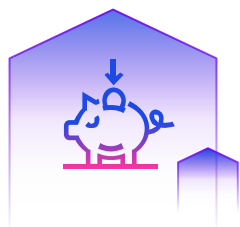
## Cross-level integration of IT infrastructure with hybrid cloud computing is gradually becoming mainstream



One major way to implement distributed architecture is to move to the cloud. Essentially, cloud computing virtualises resources and breaks down barriers to resource access that were previously posed by time and space. The cloud efficiently integrates resources at the “cloud, network and terminal” levels in order to meet the need for low latency, high performance and large bandwidth computing. Currently, financial service cloud computing is evolving from private cloud computing to a hybrid model that is formed by “public cloud + private cloud + industry cloud.” Private cloud computing meets the security needs of financial institutions, which must adhere to the principle that “data should not be moved out of the local region,” but its economies of scale are limited. On the other hand, the public cloud and industry cloud are built on a more open ecosystem. They can help financial institutions to flexibly allocate internal and external resources and speed up cloud migration. Hybrid cloud strikes an optimal balance between the three elements of security, cost, and efficiency. Relatedly, “cloud native” has become an important trend in the industry. This concept stresses the development of loosely coupled systems that use containers, microservices and other cloud-native technologies to enable seamless connectivity between the private cloud, public cloud and industry cloud, with the aim of supporting more agile and flexible application development.



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## Wealthtech segment

Fintech companies are providing integrated services and helping financial institutions build open and innovative wealth management platforms

The incomes of Chinese residents are still growing fast, providing fertile ground for the development of the wealth management industry. According to a report released by the Development Research Centre of the State Council, middle-income groups as a share of China's total population will rise from 30 percent in 2021 to 50 percent in 2030, making them an important part of the wealth management sector and providing huge room for the industry to develop<sup>1</sup>.

Fintech companies are expanding from offering underlying technologies to providing integrated service packages to asset management institutions



As the digital transformation of asset management institutions progresses, fintech enterprises will focus on providing comprehensive services for the entire asset management process. At present, fintech companies are using AI, big data, cloud computing and other technologies to provide integrated services—from data production and information extraction to intelligent modelling and investment decision-making assistance. In this way, they are providing one-stop digital intelligence products and services to professional institutions such as fund companies, brokerages, banks and trusts. Some companies have even formed complete product and service suites powered by self-developed technology engines to offer support that covers underlying technologies, middle platforms and applications. On the underlying technology platforms, algorithmic trading execution, advanced algorithmic models and new technologies such as machine learning are used to provide intelligent algorithmic trading services and quantitative trading solutions for wealth management institutions. At the middle platform level, data, algorithm and knowledge platforms are deployed to realise whole-process modeling of “data fusion, data development, knowledge fusion, and knowledge computing,” so as to improve the governance and use of corporate data and knowledge. At the application level, based on the complete technical architecture underpinning the data middle platform, wealth management firms are able to access one-stop platforms that flexibly combine multiple business modules, allowing them to engage in self-defined data value mining and build intelligent applications to more effectively apply corporate data.

<sup>1</sup> Development Research Centre of the State Council, Consumption-led Efforts to Expand and Meet Domestic Demand, September 2022.

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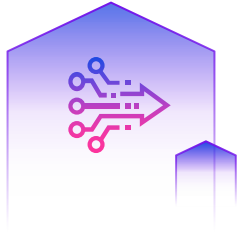
The opening up of the wealth management industry is accelerating, resulting in a more open and innovative ecosystem



Building an open ecosystem can help wealth management institutions expand their online operations, service channels, and product and service systems, and improve their user experience. More and more wealth management firms have shifted from the previous “product sales” mindset to a wealth planning service model that covers the entire life cycle of their clients. Under this model, wealth management firms take into account their clients’ goals and provide richer experiences and services, including inheritance planning, retirement planning, medical planning, and integrated investment and financing. In order to meet the diversified financial needs of clients, wealth management institutions have started to integrate internal and external resources to create open, innovative wealth management platforms. Some financial institutions that possess multiple licences have begun to deepen intra-group synergies, for example by breaking down barriers to client information within the group and establishing intra-group client referral mechanisms and other tools. Other firms are taking measures to complement their resources, including in terms of clients, products, technical support and data, to enhance their clients’ investment experience and increase their asset management scale. Meanwhile, some financial institutions have opted to integrate their internal group resources and then open up their wealth management platforms to external parties. In this way, they can interact with other institutions in an open ecosystem to improve their operations.



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## Supply chain technology segment

Technology is empowering digital supply chain finance

Recently, the State Council released the *Outline of Strategic Planning for Expanding Domestic Demand (2022-2035)* (the "Plan"), which proposes "steadily expanding domestic demand and creating new engines for domestic demand growth," and "focusing on improving the efficiency of factor allocation and promoting the innovative development of supply chain finance, information and data, human resources and other services." Going forward, the growing domestic market will spur demand for supply chain finance services, while technologies including AI, blockchain, IoT and big data will be used to empower the supply chain. These developments will open up greater room for the growth of supply chain finance.

Digital intelligence is empowering the supply chain, and supply chain technology is promoting data penetration



The Plan proposes to "speed up the promotion of digital industrialisation and industrial digitisation, encourage the inclusive use of 'clouds and digital intelligence,' steadily improve digital governance, and strengthen the digital capabilities of small and medium-sized enterprises, especially those in the manufacturing industry." Industrial digitisation provides the basis for the digital upgrading of supply chain finance and will drive the digitisation of modern logistics systems and supply chains. By adopting technology, traditional supply chain finance can move faster towards digitisation and intelligence, and this opportunity presents huge room for the growth of digital supply chain finance. According to the *2022 Insights Report on Fintech Leaders* jointly released by KPMG and the National Internet Finance Association of China (NIFA), fintech companies are most optimistic about the future of digital supply chain finance, with 53 percent of the respondents selecting this field as a promising one and 23 percent making it their first choice<sup>2</sup>.



<sup>2</sup> KPMG and NIFA, 2022 Insights Report on Fintech Leaders, September 2022.



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However, the digital transformation of supply chain finance still faces challenges around insufficient fintech integration. Research conducted by the China Federation of Logistics and Purchasing shows that enterprises have self-developed over 38 percent of their digital technologies, with only 11.54 percent of enterprises relying on upstream and downstream support<sup>3</sup>. The sector's digitalisation process is uncoordinated, and upstream and downstream enterprises do not cooperate well. For this reason, core enterprises and upstream and downstream enterprises urgently need to strengthen collaboration, so that they can jointly build data platforms, promote data penetration across the whole supply chain, solve the problems of data silos and information asymmetry, and enable core enterprises' credit guarantees to cover first-tier, second-tier and even third-tier suppliers. Going forward, enterprises can harness AI, blockchain, IoT and other digital intelligence technologies to open up the supply chain links of research, procurement, production, sales and services; integrate the supply chain's commercial flows, product flows, capital flows and information flows; reinforce cooperation between core enterprises and upstream and downstream enterprises; and improve the efficiency of fund usage in the supply chain. These efforts will help cultivate an open ecosystem that promotes the development of all enterprises.

With the help of technology, supply chain finance services are shifting from traditional loan services to integrated financial services



The 20th National Congress of the Communist Party of China proposed "enhancing the resilience and security of industrial and supply chains" and "unswervingly maintaining the security of key industrial and supply chains." The development of industrial chains requires enterprises to strengthen and expand the chains, which will result in the introduction of more supply chain finance services. Some supply chain enterprises have already started to expand their business from traditional loan services to integrated financial services. Using AI, blockchain, IoT and big data, these enterprises are offering innovative online solutions that are scenario-based and data-driven. For example, technologies such as AI and NLP are being used to mine and analyse massive amounts of data, and generate information about opportunities and risks in pre-lending, in-process and post-lending scenarios to help business partners explore opportunities, analyse risk, track information and raise management efficiency for existing or target customers. Technological systems are also being used to provide professional consulting services, including operational services, marketing and promotional services, and product and IT consulting services. In addition, innovative enterprises are using RPA, AI and other technologies to develop applications that address the needs of enterprises in various supply chain scenarios, including collection, payment, investment, financing and management. These applications are laying the foundation for the digital transformation of corporate management.

<sup>3</sup> China Federation of Logistics and Purchasing, China Logistics and Supply Chain Finance Digital Development Report 2022, June 2022.

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## Inclusive technology segment

Technology is driving the construction of long-term mechanisms for the provision of financial services to SMBs and individual customers

Inclusive technology companies have been deepening and changing their technological methods. They not only focus on pursuing mechanism innovation and product innovation to offer inclusive financial services that meet the personal financial needs of long-tail customers, but also develop long-term mechanisms to provide financial services to small and micro businesses (SMBs). In recent years, financial institutions have been widely adopting inclusive technology in order to increase the accessibility and sustainability of their financial services and improve the affordability of credit costs, with the goal of engaging in inclusive finance. These technologies have improved the quality and efficiency of inclusive finance and are driving its high-quality development.

## Developing a long-term mechanism for loan services for SMBs



In May 2022, the People's Bank of China issued the *Notice on Promoting the Establishment of a Long-term Mechanism for Boosting the Financial Sector's Confidence, Willingness, Capability, and Expertise in Lending to Micro and Small Businesses* (the "Notice"), which proposes 20 initiatives, including the promotion of technological empowerment and product innovation. The role of fintech is mentioned several times in the Notice, and "strengthening the use of fintech" is specifically mentioned in Part XV. The Notice proposes embedding fintech throughout the entire financial service process for SMBs, and it also states that fintech should play a fundamental role in supporting the financial sector's "confidence, willingness, capability, and expertise in lending," so as to support the construction of a long-term mechanism for lending to SMBs.

Financial services for SMBs represent a global issue. Policy studies and fintech development in different countries over the years have shown that the key to improving financial services for SMBs and developing inclusive finance depends not on policy subsidies, but on mechanism innovation and model innovation. With the support of financial technologies, financial institutions are integrating technology, scenarios and finance in order to create new customer acquisition, risk control and profitability models for financial services for SMBs; and this is causing the strategies, organisational systems and credit culture of banks to change. The functional relationship between "size, cost and risk" in SMB lending is changing fast, and the capabilities of the credit supply chain are improving rapidly.



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The integrated development of compliance technology, green finance, and sci-tech innovation finance



Financial institutions tend to not grant loans to SMBs due to the higher risk that the loans will become non-performing, and also due to concerns about rapid changes in SMB operations, which complicate post-loan management. However, by integrating compliance technology and inclusive finance, enterprises can develop due diligence exemption systems for such credit services in order to apply exemption provisions related to the submission, review, confirmation and reconsideration of due diligence materials. In addition, technologies such as blockchain can be used to prevent data tampering and tracing, thus reducing malpractice and other forms of non-compliance.

At the 24th meeting of the Central Commission for Comprehensively Deepening Reform in February 2022, policymakers called for promoting the integration of inclusive finance with green finance and sci-tech innovation finance. In respect of agriculture, rural revitalisation, precise poverty alleviation and SMBs, the service targets of inclusive finance and green finance overlap significantly. However, since green finance currently focuses on supporting energy production and supply, transportation and infrastructure construction, SMBs have little access to green finance as their participation in these fields is limited. In fact, agricultural producers and SMBs generate significant amounts of pollution due to their unsophisticated production methods and low technology, and for this reason they should represent key targets of pollution control. In this context, financial institutions should integrate inclusive finance and green finance in order to grant agricultural producers and SMBs access to green financing.



# 2023 Fintech Segment Trends



## Paytech segment

Cross-border payment sees new growth markets, with smart contracts and cross-border payment expected to expand the use of e-CNY

As the payments market matures and regulatory policies are refined, the payment sector is gradually moving from unruly growth to high-quality development. The application of AI, big data, blockchain, and privacy computing, among other technologies, by enterprises in the payment sector is enhancing payment efficiency, promoting data multiplication and generating more value from payment data elements.

Cross-border payment expands, and concerns around digital payment security grow amid geopolitical conflicts



Policy support for the expansion of cross-border e-commerce pilot schemes and cross-border payment business has presented new opportunities to cross-border payment business. In February 2022, the State Council agreed to set up integrated cross-border e-commerce pilot zones in 27 cities and regions, including Ordos, in order to expand the cross-border e-commerce pilot programme. In June 2022, the central bank issued the *Notice on Supporting Cross-border RMB Settlement for New Forms of Foreign Trade*, extending the payment scope of payment institutions from products and services to items in the current account. This policy has widened the scope of cross-border payment business and opened up a new market for the industry. Cross-border payment systems that incorporate technologies such as AI, blockchain and big data can reduce manual processing, shorten settlement times and improve payment efficiency. Notably, the security of cross-border payments has come to the fore amidst geopolitical conflicts, and as a result countries are focusing on the autonomy, security and independence of their cross-border finance flows. In addition, some countries and regions are building diversified regional cross-border payment infrastructure. Against this backdrop, cross-border payment institutions should pay attention to security issues when conducting offshore business and prepare contingency plans for any problems that may arise.



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## The payment industry is deepening interconnectivity and generating more value from data elements



The *14th Five-Year Plan for the Development of the Digital Economy*, which was released in early 2022, states, “The digital economy will start to fully expand in 2025, at which time its core industries should account for 10 percent of gross domestic production (GDP).” Amid the rapid development of the digital economy and with the support of policies that promote interconnectivity, the closed payment ecosystem is opening up to accommodate external payment methods, such as Alipay, WeChat Pay, and Cloud Flash Pay. Interconnectivity between leading payment institutions will gradually eliminate payment barriers, end monopolies in the payment industry and improve payment efficiency. As payment data is now a “factor of production,” payment giants are leveraging the multiplier effect of data and fully tapping the value of payment data elements in an effort to promote interconnectivity and adapt to the digital economy.

## As the e-CNY pilot programme expands, smart contracts and cross-border payments are expected to enrich the use of the e-CNY



The e-CNY plan has been launched, and regulators are actively promoting the e-CNY, resulting in an expanded e-CNY pilot scheme and richer application scenarios. The e-CNY can now be used in consumer scenarios covering people’s livelihood, clothing, shelter and transportation; in business scenarios covering bill discounting, green credit and supply chain finance; and in government-related scenarios covering provident fund payment, government subsidies and taxation. At this point, the stability of the e-CNY system and the scenarios in which the e-CNY can be used have been effectively verified. Going forward, efforts will focus on expanding scenarios and constructing the e-CNY system. Enterprises can use smart contract technologies that promote consistency, observability and self-compliance to broaden use cases for the e-CNY. As the e-CNY is programmable and scalable, it can be linked to smart contracts for the purposes of conditional payments. Since 2022, e-CNY linked with smart contracts have been used to make prepayments for educational institutions, gyms, etc. to address pain points in these consumer scenarios.

The e-CNY is also being used to make cross-border payments in international trade. The multi-CBDC (mBridge) project, which is being jointly developed by the Bank of International Settlements Innovation Hub Hong Kong Centre, the Hong Kong Monetary Authority (HKMA), the Central Bank of Thailand, the Digital Currency Institute of the People’s Bank of China and the Central Bank of the United Arab Emirates, recently completed the first real-value pilot transactions using the digital currencies of four central banks. In this way, the mBridge platform allows commercial banks to complete cross-border remittances and foreign exchange operations for their customers. The pilot programme validates the feasibility of using the e-CNY to make cross-border payments for international trade settlement purposes. With richer application scenarios, a refined ecosystem and more advanced technologies, coupled with its low transaction costs and high security, the e-CNY will become more accessible and cover more transactions. In the future, it is expected to become a substitute for third-party payment methods to some extent and weaken their influence.



# 2023 Fintech Segment Trends



## Insurtech segment

Insurtech is trending toward omni-scenario integration and vertical segments

Insurtech companies are pursuing integration and innovation to penetrate the entire chain of the insurance sector, and they are making breakthroughs in scenarios in an effort to steadily optimise the traditional insurance business model. In this way, they are driving innovation in the insurance industry and pushing insurers to adapt to digitalisation trends. Meanwhile, regulators have issued a number of policies, such as the *Guiding Opinions of the China Banking and Insurance Regulatory Commission on Promoting the Quality Development of the Banking and Insurance Industries*, the *Guiding Opinions on Promoting the Online Development of Property Insurance Business* and *The General Office of the China Banking and Insurance Regulatory Commission on Issuing the Three Parallel Programmes for Promoting the Quality Development of the Property Insurance Industry*, to encourage insurers to steadily improve their digital transformations, online services and intelligent operations.

The development of insurtech is moving from technological reform to omni-scenario integration



The development of fintech has gradually changed the core elements of competition from assets and outlets to technology and data. In recent years, significant breakthroughs in underlying technologies have laid the foundation for insurtech innovation, which is resulting in insurers adopting new technologies and developing new business models that enable transformation.

Over time, we have learned that technological innovations require the support of application scenarios and data resources. To be fully embraced, insurtech should be consumer-centric, and insurtech companies should understand that the development of the insurance industry relies on risk transfer and loss sharing, which are the industry's core values. Technology should be integrated with insurance business model innovation. Furthermore, insurtech enterprises should consider how they can help insurers provide simpler, automated interaction processes and more personalised services for different customer groups. To this end, they should focus on capturing more value from data and designing innovative products based on user needs. By following this approach, insurtech enterprises can build an insurance ecosystem, empower insurers and create more value for the industry.

# 2023 Fintech Segment Trends

## Insurtech companies should explore the new logic of “insurance + services” and develop vertical segments



Going forward, insurtech companies should also focus on vertical insurance scenarios and make breakthroughs in sub-segments. For example, in the post-pandemic era, given heightened public awareness around medical services and health, more domestic insurtech platforms are working to build closed-loop ecosystems that combine the Internet, medicines, pharmaceuticals, and insurance. Unlike in Europe and the US where effective closed-loop ecosystems have been formed between medical resources and insurance payments, domestic insurers have traditionally faced difficulties in improving the payment chain for medical treatment so as to reduce patients' financial burden, and in pushing hospitals to provide more targeted treatment through payment incentives.

Using big data analysis and AI, third-party insurtech companies are capturing the demands of different stakeholders in the ecosystem, and by leveraging the latest technologies, they can build a win-win business model for all parties. For instance, pharmaceutical companies have a demand for using “volume to compensate for price,” i.e. they are willing to moderately lower drug prices to drive sales growth, creating room for win-win situations for both patients and pharmaceutical companies. Meanwhile, insurers face high marketing channel costs. If third-party insurtech companies can provide accurate services to reduce insurers' channel costs, insurers can spend more of their premiums on medical claims while reducing costs and increasing efficiency, thus achieving a win-win situation for both patients and insurers. Moreover, from a consumer perspective, many patients are not highly compliant in taking their medication; common problems include irregular medication, unauthorised discontinuation of medication and inadequate dosage. To address this issue, third-party insurtech platforms can promote business growth for pharmaceutical companies by guiding users through their service experience and encouraging them to take their medication as prescribed, especially for chronic illnesses<sup>4</sup>.



<sup>4</sup> A New Journey in Insurtech Integration: Building a Four-dimensional Closed-loop Ecosystem Combining Internet, Medicine, Pharmaceuticals and Insurance, 21jingji.com, 20 December 2022, <https://m.21jingji.com/article/20221220/herald/56dfd0c3cac1cf8c86e1a745a98cd3e1.html>



# 2023 Fintech Segment Trends



## Regtech segment

Regulators are expected to use market-based mechanisms to improve regulatory efficiency, and enterprises are proactively enhancing compliance management

The *Fintech Development Plan (2022-2025)* proposes to “accelerate the comprehensive application of regtech and strengthen the development of digital regulation capabilities.” At present, regtech is being harnessed by regulators (the government) in supervisory processes as well as by regulated entities (enterprises) in their effort to ensure compliance. On the regulatory front, regtech helps financial regulators improve regulatory processes and enhance regulatory efficiency; meanwhile, financial institutions can use regtech to automate reporting and conduct data analytics, easing compliance pressure.

In the future, regtech will enable regulators to use market-based mechanisms to improve regulatory efficiency, and financial consumer protection will be an important application area



Refined regulation is becoming the norm amid increasingly stringent regulation, and in light of this trend, regulators need comprehensive data to promptly and accurately grasp the dynamics of the entities they are regulating. However, as a result of rapid financial innovation and the integrated operations of regulated entities, financial risks are increasingly concealed and complex, rendering traditional regulatory techniques inadequate. Recently, the People’s Bank of China proposed to “strengthen regtech, and actively use big data, AI, cloud computing and other technologies to enrich regulatory tools and enhance regulators’ ability to identify, prevent and resolve cross-sectoral and cross-market financial risks<sup>5</sup>.” However, instead of relying on regulatory agencies to upgrade regtech, the process should be market-driven. For example, the development of regtech can be outsourced to technologically advanced third-party regtech companies that provide services to regulators. At present, despite the increasing number of such companies in the regtech ecosystem, the types and number of participating entities are limited, and there is still room to enhance cooperation and communication in the ecosystem. Third-party regtech companies help enhance regulatory efficiency, and more regtech companies will enter the market in the future. Going forward, we expect to see stronger coordination and cooperation among regulators, regulated entities, and third-party regtech companies, which will enhance regulatory data sharing and boost regulatory efficiency.

<sup>5</sup> Zhou Xiaochuan: Actively Using Big Data, AI and Other Technologies to Enrich Financial Regulatory Tools, China.com.cn, 10 September 2021, <https://finance.china.com.cn/news/20210910/5652628.shtml>

# 2023 Fintech Segment Trends

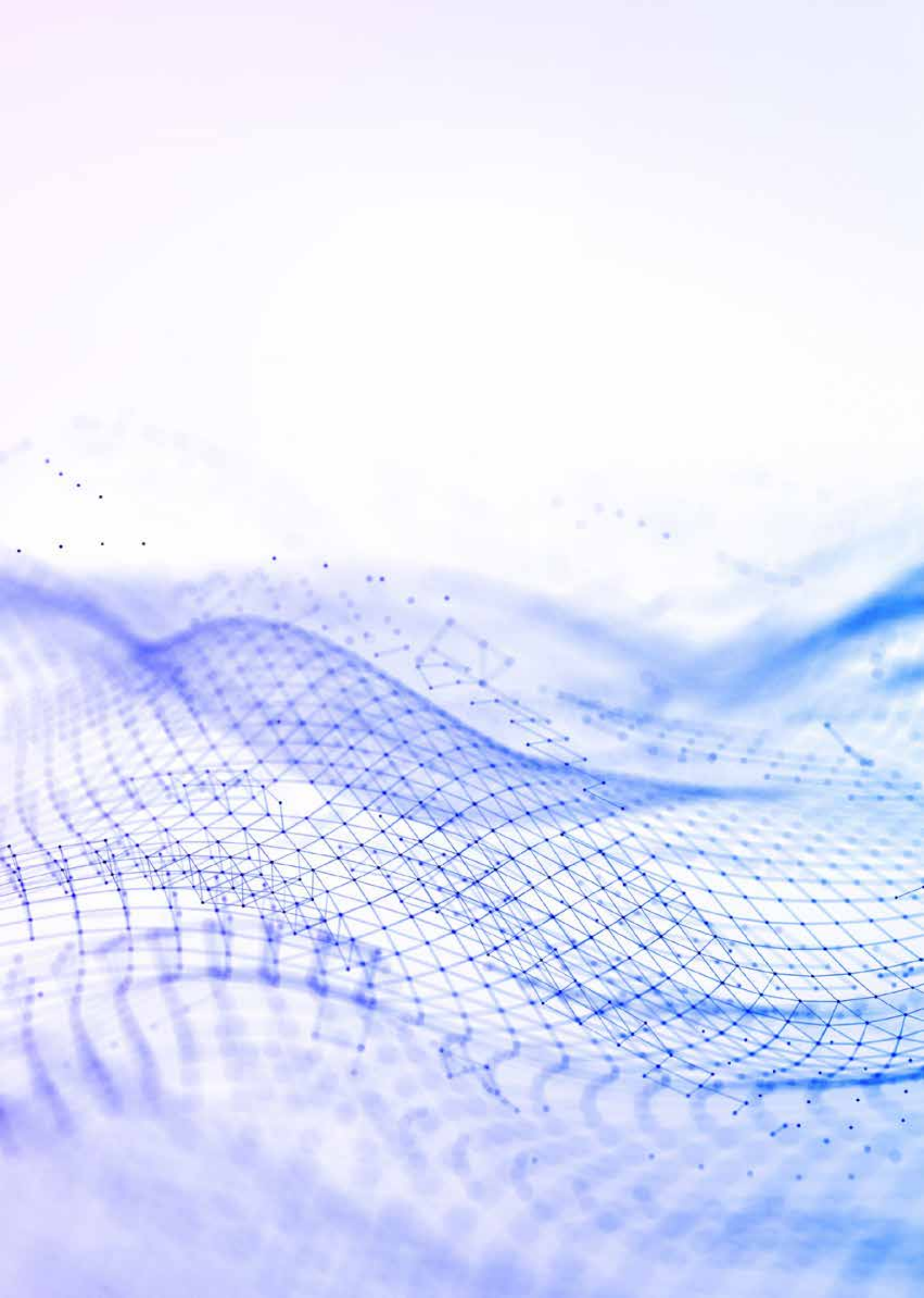
The rapid development of fintech has provided financial consumers with more innovative products and convenient services. At the same time, risks around personal information leaks and transaction fraud have been growing more insidious, increasing the complexity of efforts to protect financial consumers' rights and interests. Regulatory requirements for consumer protection are also becoming increasingly stringent, and regulators are focusing on using technology to achieve efficient oversight. Going forward, regtech will be used to develop a consumer protection system that covers the entire consumption process. Technology will be applied at all steps of the process, from information access to the final use of financial services. Throughout the entire process of information acquisition, customer access, product purchase and after-sales service, organisations will deploy data security, firewall and host security tools, among other basic security measures, to protect personal data from leakage and unauthorised access and ensure the security of personal data.

**Regulated entities are enhancing their compliance management capabilities as technology enables the development of platform-based regtech**



Strengthened oversight and the frequent release of regulatory policies that emphasise “effective supervision, strict accountability and zero tolerance” are driving regulated entities to actively explore the use of technology in compliance. The evolution of regtech is causing regulated entities to move from a passive response posture to one that focuses on proactive and inclusive response. Enterprises are using regtech to actively enhance their financial compliance management capabilities and ensure safe and sound operations. In this way, their approach is shifting from “passively responding to compliance requirements” to “compliance-driven business development.” At present, regtech is mainly being applied in the fields of anti-money laundering (AML), related-party transaction management and regulatory data reporting. While specific needs in these three compliance scenarios may vary, they require common core technical elements, such as data platforms, intelligent rule databases, subject identification and assessment capabilities, and whole-process risk monitoring capabilities. Hence, compared to top-down investment in regtech, construction from the bottom is more agile and extensible. With this structure, enterprises can flexibly respond to future regulatory requirements in other areas while also meeting their needs in respect of AML, related-party transactions and regulatory data reporting<sup>6</sup>. Under this scenario-based construction trend, regtech enterprises are using big data, blockchain, optical character recognition (OCR), NLP and knowledge graphs, among other technologies, to steer regtech applications towards professional regulatory compliance, with the goal of empowering human-computer interaction and digital intelligence and meeting the regulatory needs of various parties.

<sup>6</sup> Tencent and KPMG, Technology for Good: A White Paper on Regulatory Technology, June 2022.







# Appendix

# Appendix I

## Summary of Fintech-related Laws and Regulations

Date	Policy	Issued by	Official link
<b>2022</b>			
Jan	Guiding Opinions of the General Office of the China Banking and Insurance Regulatory Commission on the Digital Transformation of the Banking and Insurance Sectors	China Banking and Insurance Regulatory Commission	<a href="http://www.gov.cn/zhengce/zhengceku/2022-01/27/content_5670680.htm">http://www.gov.cn/zhengce/zhengceku/2022-01/27/content_5670680.htm</a>
Jan	Fintech Development Plan (2022-2025)	People's Bank of China	<a href="http://www.china-cer.com.cn/guwen/2022010516303.html">http://www.china-cer.com.cn/guwen/2022010516303.html</a>
Mar	Notice on Strengthening Financial Services for New Citizens	China Banking and Insurance Regulatory Commission, et al.	<a href="http://www.gov.cn/zhengce/zhengceku/2022-03/06/content_5677508.htm">http://www.gov.cn/zhengce/zhengceku/2022-03/06/content_5677508.htm</a>
Mar	The Fintech Committee of the People's Bank of China Holds a Meeting to Discuss and Plan Key Tasks for 2022	People's Bank of China	<a href="http://www.gov.cn/xinwen/2022-03/24/content_5680986.htm">http://www.gov.cn/xinwen/2022-03/24/content_5680986.htm</a>
Mar	Research Report on the Digital Transformation of China's Banking Sector	Sina Financial Research Institute	<a href="https://finance.sina.com.cn/jinrong/yh/2022-03-23/doc-imcwiwss7642196.shtml">https://finance.sina.com.cn/jinrong/yh/2022-03-23/doc-imcwiwss7642196.shtml</a>
Apr	Notice on Strengthening Credit Information Sharing to Promote the Construction of a Financing Credit Service Platform Network	General Office of the National Development and Reform Commission and General Office of the China Banking and Insurance Regulatory Commission	<a href="http://www.gov.cn/zhengce/zhengceku/2022-04/09/content_5684261.htm">http://www.gov.cn/zhengce/zhengceku/2022-04/09/content_5684261.htm</a>
Apr	Initiatives of the National Internet Finance Association of China, China Banking Association and Securities Association of China on Preventing Financial Risks Related to Non-fungible Tokens	National Internet Finance Association of China, et al.	<a href="https://www.sac.net.cn/tzgg/202204/t20220413_148867.html">https://www.sac.net.cn/tzgg/202204/t20220413_148867.html</a>
Apr	Notice on Financial Services for Epidemic Prevention and Control and Economic and Social Development	People's Bank of China, et al.	<a href="https://www.safe.gov.cn/safe/2022/0418/21223.html">https://www.safe.gov.cn/safe/2022/0418/21223.html</a>
May	Notice of the People's Bank of China on Promoting the Establishment of a Long-term Mechanism for Boosting the Financial Sector's Confidence, Willingness, Capability and Expertise in Lending to Small and Micro Businesses	People's Bank of China	<a href="http://www.gov.cn/xinwen/2022-05/26/content_5692366.htm">http://www.gov.cn/xinwen/2022-05/26/content_5692366.htm</a>
Jun	Notice on the Implementation Plan for Strengthening Financial Services to Support Epidemic Prevention and Control, Promote Economic Growth, Protect People's Livelihood and Ensure Stable Development	Shenzhen Office of the China Banking and Insurance Regulatory Commission	<a href="http://www.csrc.gov.cn/shenzhen/c104305/c4013897/content.shtml">http://www.csrc.gov.cn/shenzhen/c104305/c4013897/content.shtml</a>
Jun	Guiding Opinions of the State Council on Strengthening the Construction of Digital Government	State Council	<a href="http://www.gov.cn/zhengce/content/2022-06/23/content_5697299.htm">http://www.gov.cn/zhengce/content/2022-06/23/content_5697299.htm</a>
Jun	Notice on Several Measures on Lending Full-chain Financial Support to Technological Innovation Enterprises	Beijing Local Financial Supervision and Administration Bureau, et al.	<a href="http://www.beijing.gov.cn/zhengce/zhengcefagui/202209/t20220906_2809770.html">http://www.beijing.gov.cn/zhengce/zhengcefagui/202209/t20220906_2809770.html</a>
Jul	Notice of the China Banking and Insurance Regulatory Commission on Strengthening the Management of Commercial Banks' Internet Loan Business to Improve the Quality and Efficiency of Financial Services	China Banking and Insurance Regulatory Commission	<a href="http://www.gov.cn/zhengce/zhengceku/2022-07/16/content_5701331.htm">http://www.gov.cn/zhengce/zhengceku/2022-07/16/content_5701331.htm</a>
Sep	Guiding Opinions of the China Banking and Insurance Regulatory Commission and the People's Bank of China on Promoting the Healthy Development of Movable and Rights Financing Business	China Banking and Insurance Regulatory Commission, et al.	<a href="http://www.gov.cn/zhengce/zhengceku/2022-10/01/content_5715505.htm">http://www.gov.cn/zhengce/zhengceku/2022-10/01/content_5715505.htm</a>
Oct	Guidelines for Science and Technology Ethics in the Financial Sector	People's Bank of China	<a href="http://www.czifi.org/newsinfo/4509335.html">http://www.czifi.org/newsinfo/4509335.html</a>
Oct	Report on the Development of the Digital Economy	National Development and Reform Commission	<a href="https://www.ndrc.gov.cn/fzggw/wld/hlf/lddt/202211/t20221116_1341446.html">https://www.ndrc.gov.cn/fzggw/wld/hlf/lddt/202211/t20221116_1341446.html</a>
Nov	Further Accelerating the Use of Funds Placed in Policy-based Developmental Financial Instruments and the Construction of Infrastructure Projects	National Development and Reform Commission	<a href="https://36kr.com/newsflashes/2003668879806345">https://36kr.com/newsflashes/2003668879806345</a>
Nov	Notice on the Issuance of the Overall Plan for the Construction of Pilot Zones for Sci-Tech Innovation Financial Reform in Shanghai, Nanjing, Hangzhou, Hefei and Jiaying	People's Bank of China, et al.	<a href="http://www.gov.cn/xinwen/2022-11/21/content_5728133.htm">http://www.gov.cn/xinwen/2022-11/21/content_5728133.htm</a>
Dec	Opinions on Establishing an Institutional Foundation to Better Maximise the Role of Data Elements	State Council	<a href="http://www.gov.cn/zhengce/2022-12/19/content_5732695.htm">http://www.gov.cn/zhengce/2022-12/19/content_5732695.htm</a>



# Appendix II

## Profile of the Selection Expert Team

Gao is the deputy director of the Digital Finance Working Committee of the National Internet Finance Association of China, as well as a postgraduate student in policy and science at the International Monetary Fund and the National Graduate Institute for Policy Studies. Gao currently heads the Information Technology, Group Standards and Telebanking Professional committees of the China Banking Association, and he is involved in projects such as Fintech Master Certification Training, the Fintech Application Contest, the construction of a confirmation blockchain platform, and the development of a talent pool for senior executives in China's banking sector. Gao served as director of the Funds Management Division of the World Bank Department of the Ministry of Finance and the Foreign Investment Office of the Ministry of Internal Trade, and head of the Corporate Business Department, Retail Banking Department, Institutional Banking Department, Electronic Banking Department and Operations Management Department of the Head Office of China Minsheng Bank.

Yin is secretary general of the Research Base for Financial Law and Financial Regulation at the National Institution for Finance & Development. In the course of his research, which focuses on fintech and financial regulation, Yin has published more than 50 academic papers in leading journals such as *Management World*, *China Economic Quarterly*, *China Rural Economy* and *Political Studies*. In addition, he has led and participated in a number of provincial, ministerial and national social science research projects.

### Gao Feng

Chief Information Officer of the China Banking Association and Senior Researcher of the National Institution for Finance & Development



### Yin Zhentao

Director of the Fintech Research Office of the Institute of Finance and Banking, Chinese Academy of Social Sciences



### Zhu Jianping

Doctor of Science, Nankai University; Visiting Scholar in the Department of Biostatistics, Public Health Faculty, Yale University



### Chen Qiwei

Chairman of ABC Group and President of the Yangtze River Delta Institute for Fintech Research at East China Normal University



Zhu holds various positions in Xiamen University, including professor and PhD supervisor in the School of Management, vice president of the National Institute for Big Data in Health and Medicine, and director of the Data Mining Research Centre. He is the chief expert for major projects of the National Social Science Fund of China. Zhu has been named a New Century Excellent Talent by the Ministry of Education and was included in the first batch of Class A talents in Fujian province. He serves as advisor to the National Statistical Society of China, deputy director of the Steering Committee for Teaching Statistics in Higher Education of the Ministry of Education, vice president of the Statistical Education Society of China and the Commerce Statistical Society of China, president of the Data Science and Business Intelligence Branch of the Commerce Statistical Society of China, and president of the Xiamen Statistical Society. His research focuses on mathematical statistics, data mining, data science, business intelligence, and healthcare big data.

### Jiang Kun

Member of the 8th Committee of the Chinese People's Political Consultative Conference (CPPCC) of Wuhou District, Chengdu, and Member of the Working Committee on Promoting Technological Innovation of the Sichuan Provincial Committee of the Jiusan Society



Jiang is currently the president and general director of the Chengdu Digital Future Research Institute, founding president of the Chengdu Technology Finance Association, executive president of the Chongqing Western Chamber of Commerce, and lecturer of the Development Strategy Seminar at the University of Electronic Science and Technology of China.

Chen is a renowned Chinese expert in international finance and capital markets. He has been invited to serve as an expert advisor to national financial management institutions and government agencies such as the State Administration of Foreign Exchange and China Development Bank. He has also served as an expert in corporate governance for the Shanghai Stock Exchange. Chen's professional work titled "On International Competition" won the Sun Yefang Prize for Outstanding Works in Economics. Chen is among the first scholar entrepreneurs to introduce internationally accepted methods and practices for mergers & acquisitions (M&As) and restructuring in China. Since the 1990s, he has led a series of initial public offerings, M&As and restructurings of listed companies in China, as well as venture capital and private equity investments. Since 2019, Chen has taken the lead in hosting the Yangtze River Delta Fintech Innovation and Application Global Competition under the support and guidance of the Fintech Professional Committee of the China Finance Society, the Beijing Fintech Industry Alliance, the Shanghai Financial Association and the Shanghai Banking Association. Over the course of his career, he has demonstrated tremendous insight into business opportunities in China's economic, financial and capital markets.

# Appendix III

## KPMG China's Fintech Team



**Andrew Huang**  
Head of Fintech

**Integrated fintech**



**Charles Zhang**  
Partner of  
Financial Services  
Assurance

**Supply chain  
technology**



**Abby Wang**  
Head of Asset  
Management  
Services

**Wealthtech**



**Eric Pang**  
Partner of  
Financial Services  
Assurance

**Paytech**



**Tracey Zhang**  
Head of Tax,  
Financial Services

**Insurtech**



**Chris Wang**  
Head of Risk  
Technology,  
Financial Services

**Regtech**



**Larry Choi**  
Partner of  
Financial Services  
Assurance

**Inclusive  
technology**



**Platform  
technology  
empowerment**



**Integrated  
technology  
empowerment**



**Big data and AI**



**Blockchain,  
privacy computing  
and security**



**Distributed computing,  
cloud computing and  
hardware acceleration**



**James Chen**  
Partner of  
Fintech, Deal  
Advisory and  
Audit



**Silvester Liu**  
Partner of  
Digitalisation and  
Fintech Consulting,  
Financial Services



**Kai Yun**  
Partner of  
Digitalisation  
Consulting, Financial  
Services

# Appendix III

## KPMG China's Fintech Team

\* The following list is in no particular order

● <b>Honson To</b> Chairman, KPMG China and Asia Pacific	● <b>Jacky Zou</b> Vice Chairman, KPMG China	● <b>Tony Cheung</b> Vice Chairman, Head of Financial Services, KPMG China
● <b>Thomas Chan</b> Head of Financial Services Assurance, KPMG China	● <b>Sam Shi</b> Head of Banking, KPMG China	● <b>Ivan Li</b> Managing Partner, Shenzhen, KPMG China
● <b>Andrew Huang</b> Head of Fintech, KPMG China	● <b>Tracey Zhang</b> Head of Tax, Financial Services, KPMG China	● <b>Abby Wang</b> Head of Asset Management Services, KPMG China
● <b>James Zheng</b> Head of IT Advisory, Financial Services, KPMG China	● <b>Koko Tang</b> Head of Private Enterprise, Southern Region, KPMG China	● <b>Kevin Kang</b> Chief Economist, KPMG China
● <b>Larry Choi</b> Partner, Financial Services	● <b>James Chen</b> Partner, Financial Services	● <b>James Ge</b> Partner, Financial Services
● <b>Kevin Gong</b> Partner, Financial Services	● <b>Michael Guan</b> Partner, Financial Services	● <b>Yvonne He</b> Partner, Financial Services
● <b>Oriental Hu</b> Partner, Financial Services	● <b>Wilson Huang</b> Partner, Financial Services	● <b>Emma Liu</b> Partner, Financial Services
● <b>Melfice Pan</b> Partner, Financial Services	● <b>Eric Pang</b> Partner, Financial Services	● <b>Simon Shum</b> Partner, Financial Services
● <b>Candice Shui</b> Partner, Financial Services	● <b>Iris Tang</b> Partner, Financial Services	● <b>Forrest Wu</b> Partner, Financial Services
● <b>Josh Ye</b> Partner, Financial Services	● <b>Christy Ye</b> Partner, Financial Services	● <b>Charles Zhang</b> Partner, Financial Services
● <b>Patrick Zhang</b> Partner, Financial Services	● <b>Silvia Zhang</b> Partner, Financial Services	● <b>Victor Zhang</b> Partner, Financial Services
● <b>Sandra Zuo</b> Partner, Financial Services	● <b>Dennis Yeung</b> Partner, Corporate Services	● <b>Ella Chen</b> Partner, Tax Services
● <b>Felix Feng</b> Partner, Tax Services	● <b>Chris Ge</b> Partner, Tax Services	● <b>Adam He</b> Partner, Tax Services
● <b>Gracie Li</b> Partner, Tax Services	● <b>Kelly Liao</b> Partner, Tax Services	● <b>Grace Luo</b> Partner, Tax Services
● <b>Minna Sheng</b> Partner, Tax Services	● <b>Tanya Tang</b> Partner, Tax Services	● <b>Mimi Wang</b> Partner, Tax Services
● <b>Laura Xu</b> Partner, Tax Services	● <b>Robert Xu</b> Partner, Tax Services	● <b>Alex Zhang</b> Partner, Tax Services
● <b>Eva Chow</b> Partner, Tax Advisory	● <b>Travis Du</b> Partner, Deal Advisory	● <b>Joyce Ge</b> Partner, Risk Consulting
● <b>Jason He</b> Partner, Management Consulting	● <b>Kai Yun</b> Partner, Management Consulting	● <b>Frank Li</b> Partner, Management Consulting
● <b>Haoyu Liu</b> Partner, Risk Consulting	● <b>Silvester Liu</b> Partner, Management Consulting	● <b>Ryan Su</b> Partner, Deal Advisory
● <b>Chris Wang</b> Partner, Risk Consulting	● <b>Kelvin Wang</b> Partner, Deal Advisory	● <b>May Yang</b> Partner, Management Consulting
● <b>David Zhou</b> Partner, Deal Advisory	● <b>Vivian Kou</b> Director, Tax Services	● <b>Helen Li</b> Director, Tax Services
● <b>Sophie Lu</b> Director, Tax Services	● <b>Vivian Shao</b> Director, Tax Services	● <b>Lennie Zhu</b> Director, Tax Services
● <b>Derek Li</b> Director, Deal Advisory	● <b>Bruce Sun</b> Director, Deal Advisory	● <b>Elly Zhang</b> Director, Deal Advisory
● <b>Alex Tang</b> Director, Management Consulting	● <b>James Wang</b> Director, Management Consulting	● <b>Sandy Wang</b> Director, Risk Consulting







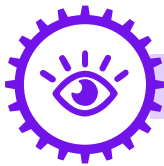
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# KPMG China's Fintech Series reports



## KPMG China Leading Fintech 50 reports (2016-2021)

KPMG China released the KPMG China Fintech 50 for the first time in 2016, drawing widespread attention from the industry.



## KPMG's Insights Report on Fintech Leaders (2020-2022)



# KPMG China's Fintech Series reports



## Pulse of Fintech series reports



## The Greater Bay Area Fintech Flying Fish Enterprises 20 (2021)





# About KPMG China

- As of 2022, KPMG China has:

About **15,000** partners and employees

- Offices in **31** cities

KPMG deploys a single management structure across the Chinese Mainland, Hong Kong SAR and Macao SAR, and our offices are positioned in close proximity to our clients. This allows us to efficiently and rapidly deploy resources wherever our clients are located and effectively serve companies across the country.



Providing professional services in Hong Kong SAR, China for over 78 years

The Hong Kong office can trace its origins to 1945.



The first company in the Chinese Mainland to be approved as a Sino-foreign joint venture

In 1992, KPMG became the first international accounting network to be granted a joint venture licence in the Chinese Mainland.



First approved special general partnership

On 1 August 2012, KPMG China became the **first** among the Big Four in the Chinese Mainland to convert from a joint venture to a special general partnership.



[kpmg.com/cn/socialmedia](https://kpmg.com/cn/socialmedia)



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