



**TMT Industry Outlook**  
After the storm, confidence remains



MAKING AN  
IMPACT THAT  
MATTERS  
*since 1845*

In the past year and a half, two black swan events—the US-China trade war and the COVID-19 outbreak—have affected the entire global TMT industry, with repercussions most likely to be felt over the next few months or even longer. To understand the industry's expectations of what the remainder of 2020 will hold, Deloitte conducted a survey of TMT industry executives in China. The survey also explores what countermeasures executives will take to contend with the trade war post-pandemic and the impact these events will have on the company's business models and operation processes.

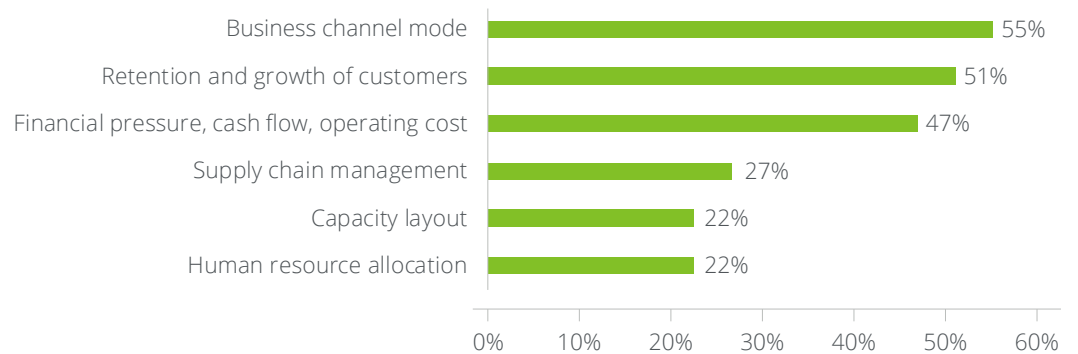
# Mounting operational pressure

Research shows that the impacts from the two black swan events on TMT enterprises include the transformation of business channel modes, the retention and growth of customers, and financial pressure related to cash flow and operating costs. These impacts were only intensified under the double attack of weakening consumer demand and channel reduction.

In addition, most enterprises are facing operational and financial challenges in regard to supply chain management; capacity layout; and lost working days due to the pandemic.

The electronics industry, in particular, faces the challenges of slower production line operations and a shortage of materials, resulting in insufficient productivity. In the communications industry, some 5G application demonstration projects have been postponed. With the largest optical fiber supply chain in the world located in Wuhan, and the demand for 5G optical fiber more than twice that of 4G, the impact on the existing development process of 5G has been significant.

**Figure: what is the most likely impact of this outbreak on your company?**

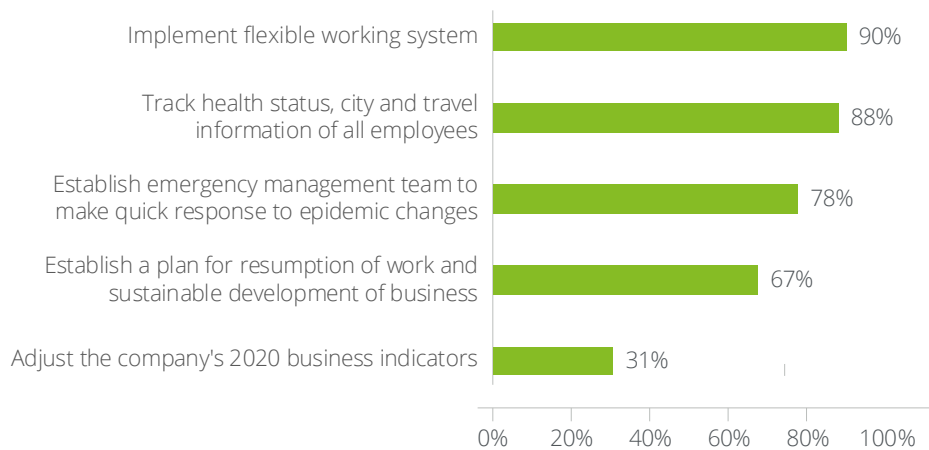


# Quick response, mobile response

Technology-based enterprises took many measures to deal with the pandemic, including the implementation of flexible working systems, tracking the health of all employees and establishing an emergency management team. They also set up rapid response teams, which established a sustainable development plan for returning to work.

At present, most TMT enterprises in China have reopened and workers have returned.

**Figure: what measures have you taken to deal with the epidemic?**



# The growth of technology

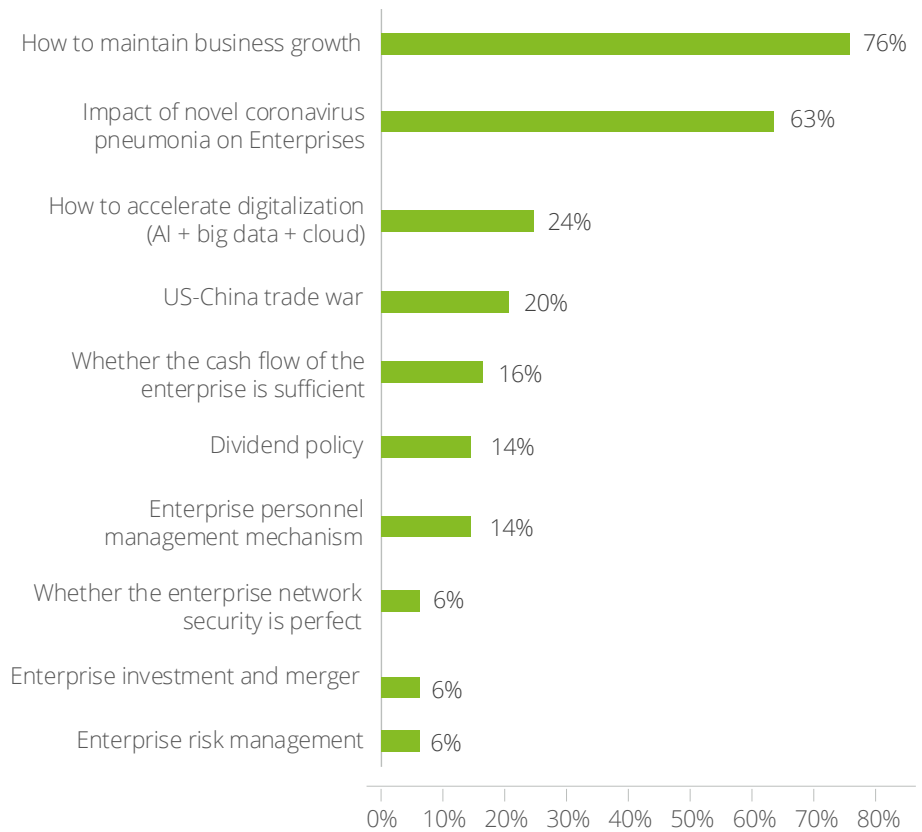
Going forward, technology-based enterprises will focus on how to maintain business growth. This will require clear strategic planning, keen market insight, operation and technology support, and reasonable risk management and control. In addition, enterprises are speeding up the pace of digitization and the use of technology—such as artificial intelligence, cloud, and big data—to gain competitive advantage.

Given more time spent at home, technology has seen a large shift in consumer demand and usage of online resources. Telecoms, media and entertainment industries show an increasing number of users and online education platforms.

With universities and primary and secondary schools across the country delaying the start of school, online education platforms and the number of users have grown. With this opportunity, online education platforms are expected to increase in popularity, and provide long-term opportunities in personalized education. Adult vocational online education seems to have even more opportunities because of its clear target customer and their willingness and ability to pay.

In addition, we are also seeing that e-commerce, with the help of intelligent logistics and digital technology, will achieve further breakthroughs and growth.

**Figure: what is your most concerned topic in 2020?**



With the development of digital technology and algorithm in recent years, e-commerce platform can more accurately match the needs of consumers. The security and efficiency of logistics will become more important issues, providing new impetus for the upgrading of e-commerce. AR / VR, UAV and robot will also provide technical support for various e-commerce application scenarios.

Markets such as fitness and telemedicine consultation have increased the demand of applications supported by 5G and are promoting the development and deployment of other technologies including artificial

intelligence, block chain, cloud computing, big data, edge computing and Internet of things.

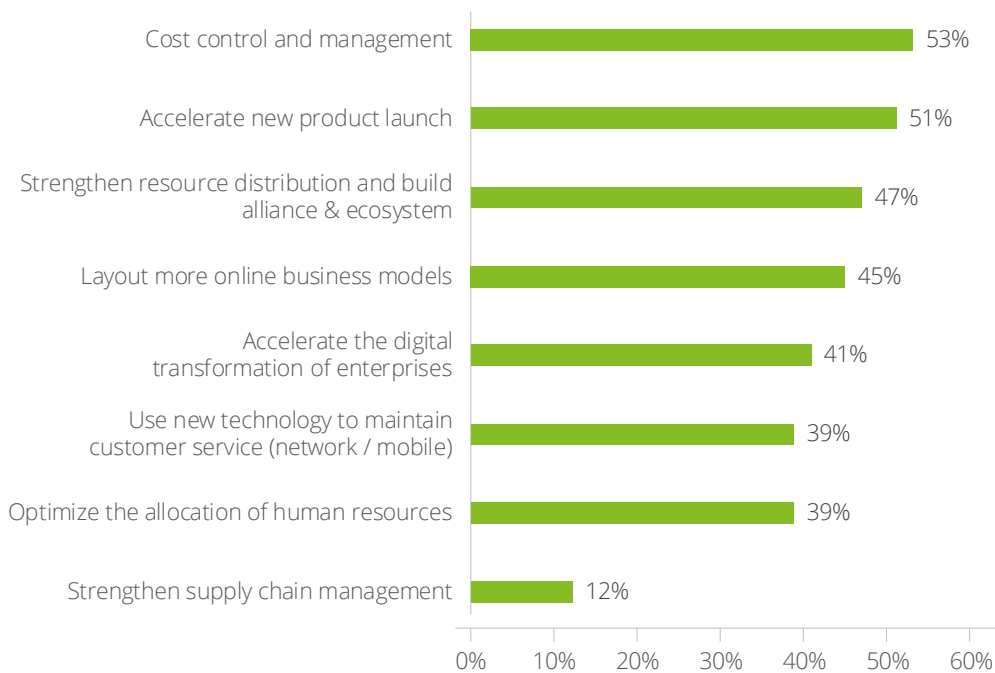
Another shift in technology is also happening around telecommuting and internet companies launching online office service platforms for enterprises. With the growth of demand, "cloud office" may become a new trend and change the operation mode of the office.

# Revitalizing the business

For the enterprises in this survey, the two most important ways to revitalize their business in 2020 will be cost control management and accelerating the launch of new products. In addition, strengthening the layout of resources as well as alliance and ecosystems are a priority.

Nearly half of the enterprises said they would explore more online business models, while enterprises with a slower digital pace said they would speed up digital transformation and improve market competitiveness

**Figure: what measures will you take to revitalize your business after the outbreak?**



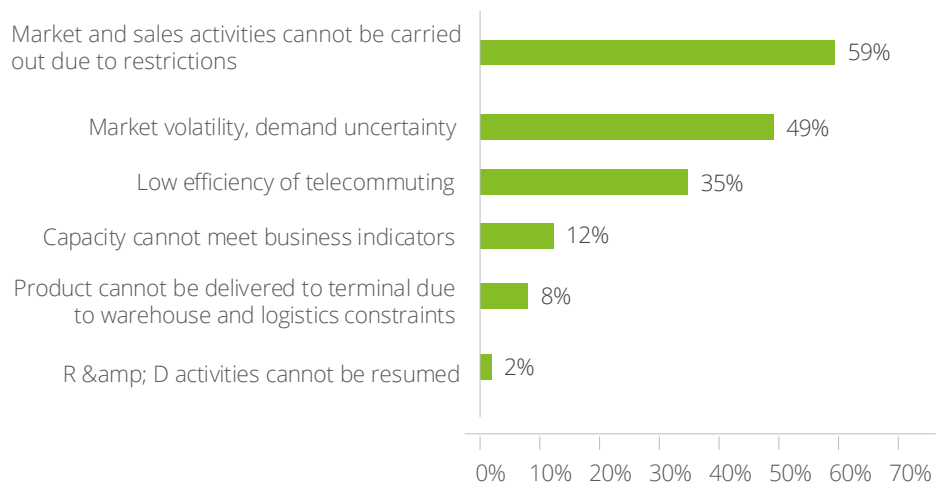
# Market challenges

The biggest challenges in 2020 come from the limited market and sales activities, as well as the demand uncertainty caused by market fluctuations, which become the most important obstacles to business growth.

On the contrary, for products where production automation is high and worker physical presence is not delaying production, including chip design or wafer production, the impact is less.

Limitations on warehouse production and logistic challenges are resulting in delays of product delivery which is having a negative effect on demand and target growth numbers for global electronic related industries.

**Figure: what is the biggest challenge for your 2020 business?**

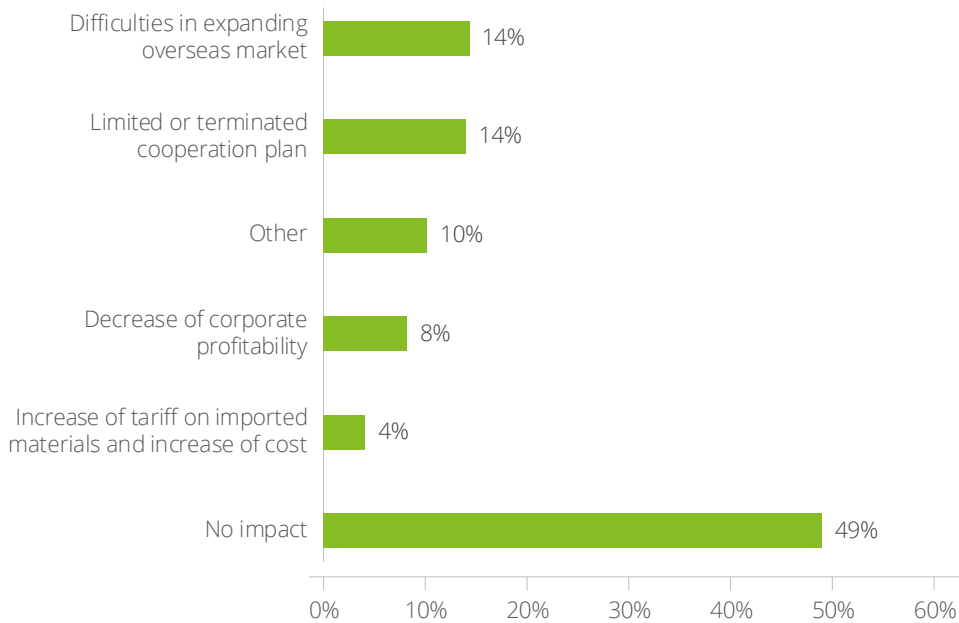


# Expansion difficulties

Research shows that nearly 70% of the enterprises have no import and export business with the United States, so the impact in the US-China trade dispute is relatively small. However, some enterprises who were affected by

the US-China trade war said that they had encountered obstacles in expanding to overseas markets, with their plans limited or even suspended.

**Figure: so far, what is the biggest impact of US-China trade war on your company's import and export?**



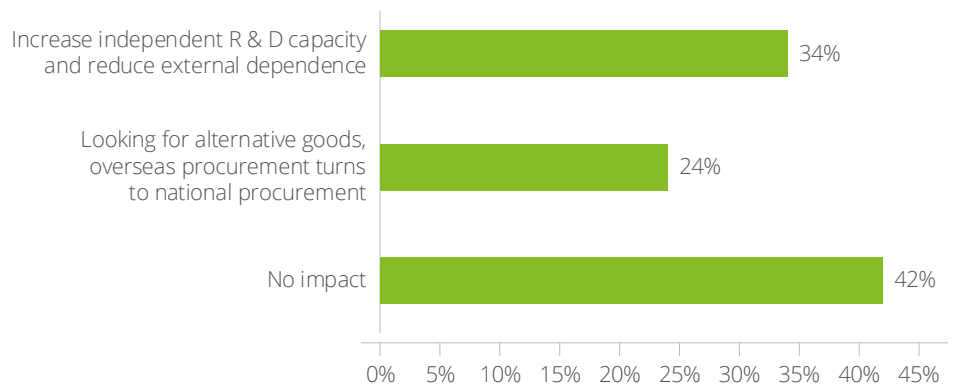


# Increasing R & D and managing risk

Some enterprises are working to minimize the role of US-China trade in the operations and are increasing their own independent R&D capabilities, reducing their foreign dependence. In recent years, other events have also prompted the industry to rethink its long-term strategy. This includes Japan's semiconductor material export restrictions on South Korea in 2019 or the restrictions on China's high-end manufacturing industry.

In light of the impact of the pandemic, domestic science and technology manufacturing enterprises are also reexamining procurement and supply pipeline enterprises, with the demand for localization more urgent than ever. In the past, up to 80% of a large factory's materials could be supplied by foreign enterprises. Now many are hoping to source materials from home.

**Figure: under the influence of US-China trade war, what measures did your company take?**

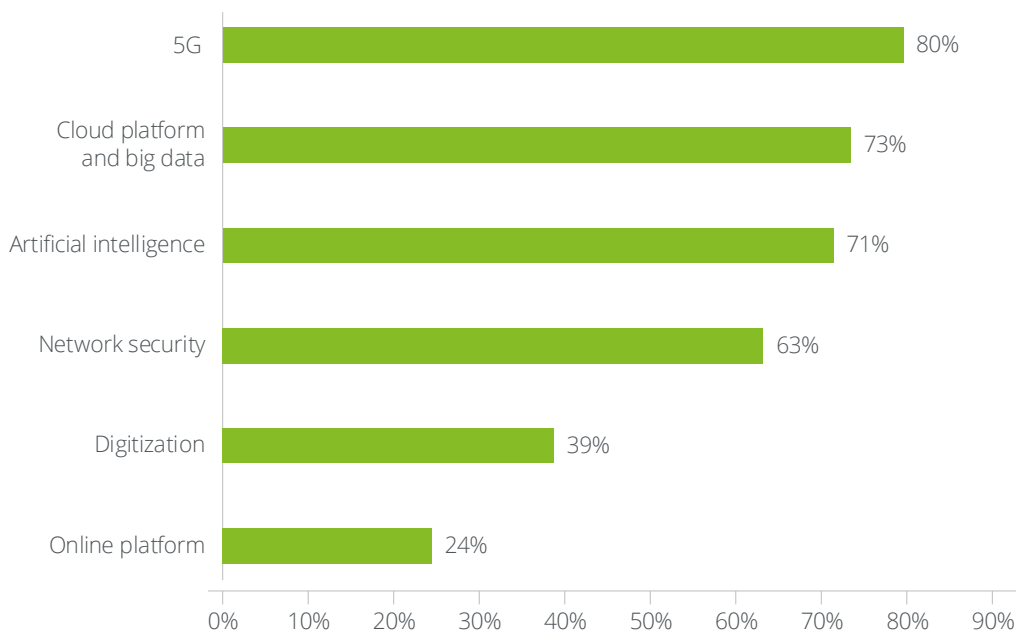


# Upgrading the industry

At present, the National Development and Reform Commission and other relevant departments are drafting the basic ideas of the Chinese government's 14th five-year plan. Officials are aiming at high-quality development and improving the quality and efficiency of China's economy, with a focus on making up for shortcomings as well as promoting upgrading and enhancing industrial innovation and competitiveness. Promoting economic transformation and upgrading will be key parts of the plan along with developing strategic emerging industries, breaking through technological bottlenecks, and mastering core technologies.

Those interviewed as part of the survey predict that the plan will also focus on 5G, cloud platform big data, artificial intelligence, and network security. Although these technologies are being widely used at present, the plan will address how to apply them to various industries at a deeper level; how to accelerate R&D in new technologies; and how to use new technologies to accelerate the transformation of traditional industries towards digitization.

**Figure: which of the following areas do you think the 14th five-year plan TMT will focus on?**

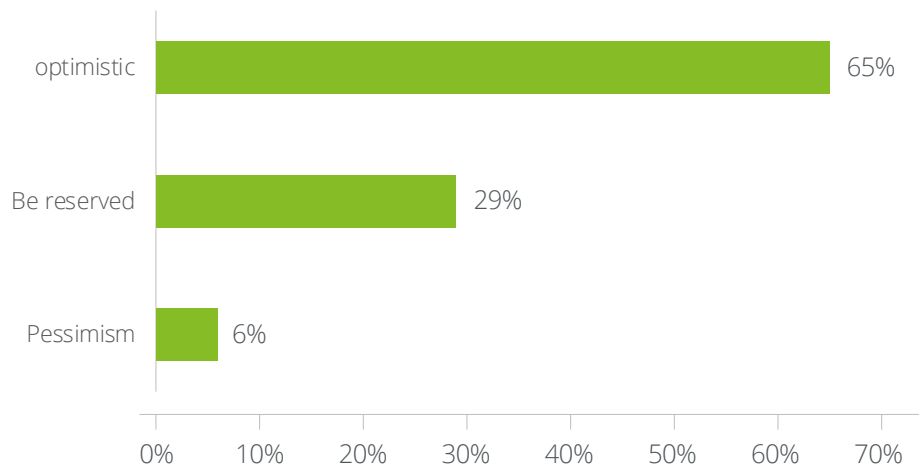


# Staying confident in 2020

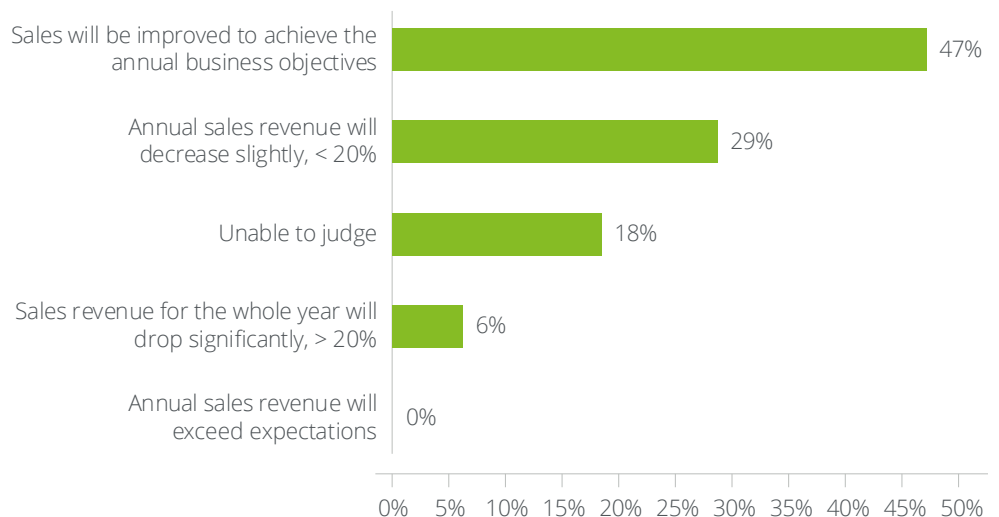
In general, most of the executives are still confident about 2020. More than 60% of the respondents expressed an optimistic attitude towards and confidence in the TMT industry this year. Nearly half of the respondents think that the business can still meet the projections for the whole

year, with about 30% of the executives more reserved. As for the performance of enterprise revenue, about 30% said that the annual revenue would decline slightly, below the 20% range, in 2020.

**Figure: Overall, what are your confidence and prospects for TMT industry in 2020?**



**Figure: How does your operating revenue look like in 2020?**



From this survey, we see that many TMT industry executives have great confidence in 2020. Though the two black swan events will indeed have some impact on technology companies in the short term, it will accelerate new business models, technologies, products and solutions in the long term as a result of the need to respond to these events, which could create new unicorns in TMT arena.

As such, if enterprises in the economic downturn can still make effective investments in strategic management, they may be able to exceed the market value despite the retrograde cycle. Whether an enterprise can see the opportunities in this crisis will depend on its own strategic choices and reserves.

In order to promote the steady growth of enterprises, optimize their structures, and increase efficiency in the short-term, enterprises need to have insight into a multitude of factors. Those factors include market demand, multi-scenario simulation of supply and demand, control costs, optimizing structures, adjusting production and marketing plans, and adjusting production arrangement flexibly. In addition, enterprises will need to strengthen upstream and downstream visibility and coordination, resolve supply chain uncertainty, implement supply chain emergency plans, monitor supply risk, and give appropriate support to suppliers to overcome difficulties. In the medium- and long-term, enterprises will need to continue to promote digitization and artificial intelligence, deepen ecosystem collaboration, build resource networks, and open up new online services to create an integrated services system.

# Contacts

## **Taylor Lam**

**TMT Industry Leader  
Telecom, Media & Entertainment  
Sector Leader  
Deloitte China**

Tel: +86 10 8520 7126

Email: [talam@deloitte.com.cn](mailto:talam@deloitte.com.cn)

## **Frank Li**

**Technology Sector Leader  
Deloitte China**

Tel: +86 10 8520 7920

Email: [frli@deloitte.com.cn](mailto:frli@deloitte.com.cn)

## **Roger Chung**

**TMT Industry Research Director  
Deloitte China**

Tel: +86 21 2316 6657

Email: [rochung@deloitte.com.cn](mailto:rochung@deloitte.com.cn)

## **Lisa Zhou**

**TMT Industry Manager  
Deloitte China**

Tel: +86 10 8512 5909

Email: [liyzhou@deloitte.com.cn](mailto:liyzhou@deloitte.com.cn)

# Office locations

## Beijing

12/F China Life Financial Center  
No. 23 Zhenzhi Road  
Chaoyang District  
Beijing 100026, PRC  
Tel: +86 10 8520 7788  
Fax: +86 10 6508 8781

## Changsha

20/F Tower 3, HC International Plaza  
No. 109 Furong Road North  
Kaifu District  
Changsha 410008, PRC  
Tel: +86 731 8522 8790  
Fax: +86 731 8522 8230

## Chengdu

17/F China Overseas  
International Center Block F  
No.365 Jiaozi Avenue  
Chengdu 610041, PRC  
Tel: +86 28 6789 8188  
Fax: +86 28 6317 3500

## Chongqing

43/F World Financial Center  
188 Minzu Road  
Yuzhong District  
Chongqing 400010, PRC  
Tel: +86 23 8823 1888  
Fax: +86 23 8857 0978

## Dalian

15/F Senmao Building  
147 Zhongshan Road  
Dalian 116011, PRC  
Tel: +86 411 8371 2888  
Fax: +86 411 8360 3297

## Guangzhou

26/F Yuexiu Financial Tower  
28 Pearl River East Road  
Guangzhou 510623, PRC  
Tel: +86 20 8396 9228  
Fax: +86 20 3888 0121

## Hangzhou

Room 1206-1210  
East Building, Central Plaza  
No.9 Feiyunjiang Road  
Shangcheng District  
Hangzhou 310008, PRC  
Tel: +86 571 8972 7688  
Fax: +86 571 8779 7915 / 8779 7916

## Harbin

Room 1618, Development Zone Mansion  
368 Changjiang Road  
Nangang District  
Harbin 150090, PRC  
Tel: +86 451 8586 0060  
Fax: +86 451 8586 0056

## Hefei

Room 1201 Tower A  
Hua Bang ICC Building  
No.190 Qian Shan Road  
Government and Cultural  
New Development District  
Hefei 230601, PRC  
Tel: +86 551 6585 5927  
Fax: +86 551 6585 5687

## Hong Kong

35/F One Pacific Place  
88 Queensway  
Hong Kong  
Tel: +852 2852 1600  
Fax: +852 2541 1911

## Jinan

Units 2802-2804, 28/F  
China Overseas Plaza Office  
No. 6636, 2nd Ring South Road  
Shizhong District  
Jinan 250000, PRC  
Tel: +86 531 8973 5800  
Fax: +86 531 8973 5811

## Macau

19/F The Macau Square Apartment H-N  
43-53A Av. do Infante D. Henrique  
Macau  
Tel: +853 2871 2998  
Fax: +853 2871 3033

## Mongolia

15/F, ICC Tower, Jamiyan-Gun Street  
1st Khoroo, Sukhbaatar District, 14240-  
0025 Ulaanbaatar, Mongolia  
Tel: +976 7010 0450  
Fax: +976 7013 0450

## Nanjing

6/F Asia Pacific Tower  
2 Hanzhong Road  
Xinjiekou Square  
Nanjing 210005, PRC  
Tel: +86 25 5790 8880  
Fax: +86 25 8691 8776

## Shanghai

30/F Bund Center  
222 Yan An Road East  
Shanghai 200002, PRC  
Tel: +86 21 6141 8888  
Fax: +86 21 6335 0003

## Shenyang

Unit 3605-3606, Forum 66 Office Tower 1  
No. 1-1 Qingnian Avenue  
Shenhe District  
Shenyang 110063, PRC  
Tel: +86 24 6785 4068  
Fax: +86 24 6785 4067

## Shenzhen

9/F China Resources Building  
5001 Shennan Road East  
Shenzhen 518010, PRC  
Tel: +86 755 8246 3255  
Fax: +86 755 8246 3186

## Suzhou

24/F Office Tower A, Building 58  
Suzhou Center  
58 Su Xiu Road, Industrial Park  
Suzhou 215021, PRC  
Tel: +86 512 6289 1238  
Fax: +86 512 6762 3338 / 3318

## Tianjin

45/F Metropolitan Tower  
183 Nanjing Road  
Heping District  
Tianjin 300051, PRC  
Tel: +86 22 2320 6688  
Fax: +86 22 8312 6099

## Wuhan

Unit 1, 49/F  
New World International Trade Tower  
568 Jianshe Avenue  
Wuhan 430000, PRC  
Tel: +86 27 8526 6618  
Fax: +86 27 8526 7032

## Xiamen

Unit E, 26/F International Plaza  
8 Lujiang Road, Siming District  
Xiamen 361001, PRC  
Tel: +86 592 2107 298  
Fax: +86 592 2107 259

## Xi'an

Room 5104A, 51F Block A  
Greenland Center  
9 Jinye Road, High-tech Zone  
Xi'an 710065, PRC  
Tel: +86 29 8114 0201  
Fax: +86 29 8114 0205

## Zhengzhou

Unit 5A10, Block 8, Kailin Center  
No.51 Jinshui East Road  
Zhengdong New District  
Zhengzhou 450018, PRC  
Tel: +86 371 8897 3700  
Fax: +86 371 8897 3710

## Sanya

Floor 16, Lanhaihuating Plaza  
(Sanya Huaxia Insurance Center)  
No. 279, Xinfeng street  
Jiyang District  
Sanya 572099, PRC  
Tel: +86 0898 8861 5558  
Fax: +86 0898 8861 0723



#### About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited (“DTTL”), its global network of member firms, and their related entities. DTTL (also referred to as “Deloitte Global”) and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see [www.deloitte.com/about](http://www.deloitte.com/about) to learn more.

Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

The Deloitte brand entered the China market in 1917 with the opening of an office in Shanghai. Today, Deloitte China delivers a comprehensive range of audit & assurance, consulting, financial advisory, risk advisory and tax services to local, multinational and growth enterprise clients in China. Deloitte China has also made—and continues to make—substantial contributions to the development of China's accounting standards, taxation system and professional expertise. Deloitte China is a locally incorporated professional services organization, owned by its partners in China. To learn more about how Deloitte makes an Impact that Matters in China, please connect with our social media platforms at [www2.deloitte.com/cn/en/social-media](http://www2.deloitte.com/cn/en/social-media).

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively the “Deloitte Network”) is by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte Network shall be responsible for any loss whatsoever sustained by any person who relies on this communication.

