

Leading & Thriving against  
Headwinds

Technology, Media &  
Telecommunications  
Industry Update



MAKING AN  
IMPACT THAT  
MATTERS  
*since 1845*



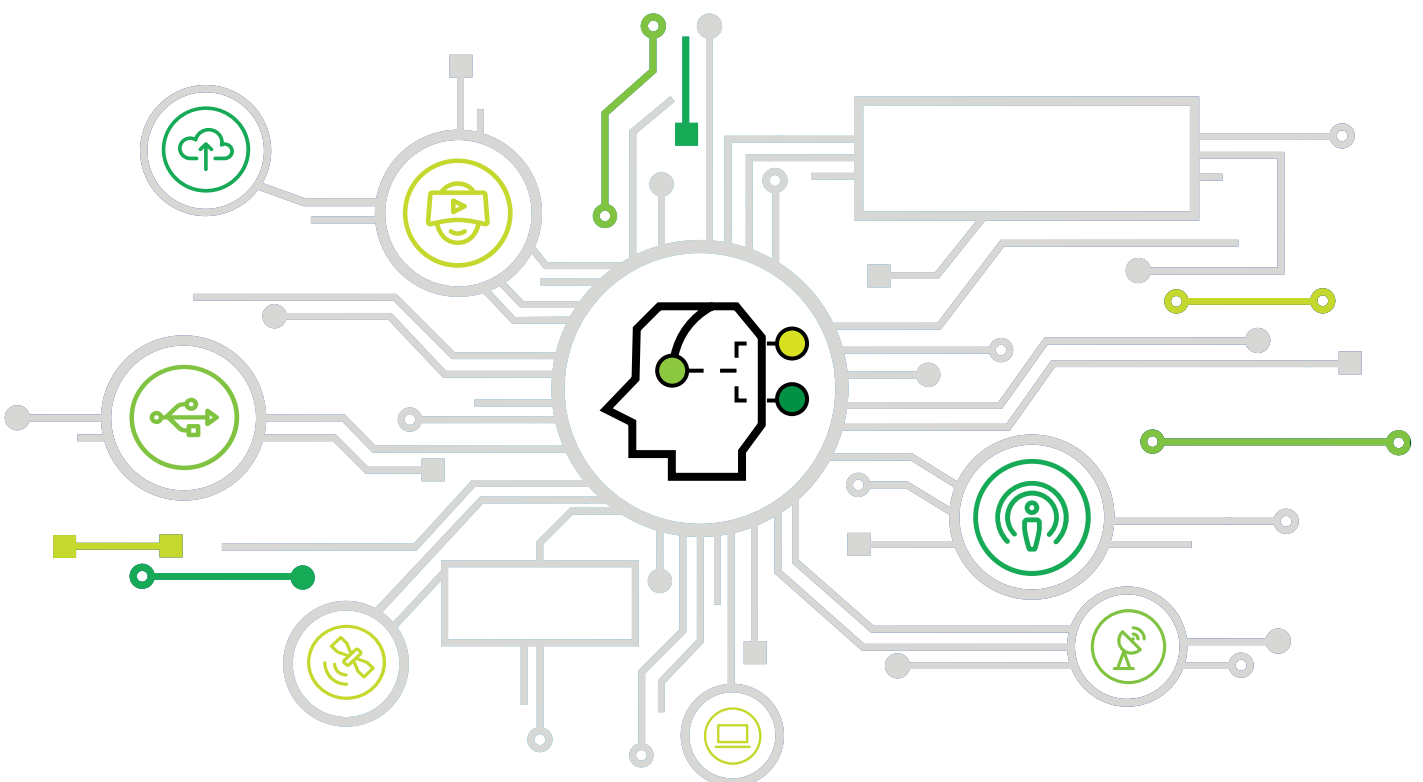
In 2020, COVID-19 has swept across the globe, reaching more than 170 countries so far and dealing a huge blow to the global economy and social governance. The epidemic has impacted the Technology, Media & Telecommunications (TMT) supply chain to varying degrees, the ramifications of which will only begin to show in the next few months or later.

The technology industry faces the risk of disruption from raw material supplies to electronics sector value chains, as well as the threat of product inflation. One positive development is how disruption has accelerated the development of remote working and led enterprises to pay more attention to assessing and reducing end-to-end risk in value chains. In addition, as carbon emissions diminish, sustainable development is arousing greater public attention.

As an increasing number of countries begin to restrict travel, people will

spend more time using technology for work, leisure and entertainment, generating massive data. Telecom companies will work to improve their network resilience and assess COVID-19's impact on their investment plans, especially in 5G. These companies are adjusting strategies to meet customers' expanding needs for network services during this time. In some countries and regions, data is being widely used as a tool to track and contain the virus.

Meanwhile, COVID-19 has had a substantial impact on supply and demand in global media, consumption and advertising. Demand for media streaming, live streaming and multi-person streaming has surged, but new projects in live sports, television and film have been put on hold or cancelled. In some sectors, such as professional sports and e-sports, businesses have come up with new ways of interacting with customers, but as many industries have suspended advertising input, the advertising sector has come under immense pressure.





# Potential long-term impact on TMT industry

## Technology



- Companies with remote-working technologies are already seeing increased demand as businesses increase their remote-working capabilities.



- Security software will see third-order benefits from a growing remote workforce. IT spending on security software will increase as organizations race to secure endpoints, particularly cloud-based tools, log management, and VPNs.



- Hardware companies may see major demand coming from enterprises, who are placing large orders for laptops and mobility devices to support employees now working from home.



- IT spending forecasts indicate continued demand for cloud infrastructure services, and potential increases in spending on specialized software. Forecasts also anticipate increased demand for communications equipment and telecom services as organizations encourage employees to work from home, and schools move to online courses.



- Most organizations do not have a tech stack in place for a reliable business-continuity plan (BCP). Due to enhanced remote work scenarios, IT departments will play a larger role in future BCPs, and will need help from IT service providers in procuring devices, setting up a resilient, flexible and secure network, disaster recovery systems, IT security, etc.



- Near-term actions are resulting in supply and fulfillment disruptions up and down the electronic manufacturing value chain. This may result in a shortage (or lack) of components, creating choke points at board and systems manufacturing.

## Telecom



- The need for ever-faster access to data and automation will enhance the focus on network equipment and communications as never before, speeding up 5G network deployments and adoption of 5G equipment.



- Network usage is skyrocketing, with many telcos reporting large spikes. In some countries, the volume of voice calls is also increasing exponentially.



- Network reliability is an ongoing focus. Network infrastructure in Europe is witnessing spikes in connection drop rates, lower audio quality, and drops in the connection rates. The European Union has tried to mitigate potential outages by asking streaming services to limit picture quality.



- Across the globe, telcos are taking a variety of measures to improve the customer experience and give people access to networking services. In the UK, telcos have increased capacity, are offering unlimited minutes, and provided anonymized data to aid in tracking the spread of COVID-19.



- It is likely that more countries will use cellular data to track the spread of the virus, which may raise questions about data privacy in the future.

## Media & Entertainment



- Demand for all forms of media—TV programs (broadcast and on-demand), short-form video, music streaming and online gaming, particularly in geographies currently under stay-home instructions, has surged. In some instances, video-on-demand (VOD) content has been offered for free or at a discount.



- Advertising revenues are down, with many online platforms projecting declines.



- Network resiliency and capacity continues to be a focus, as the demand for content surges. In the European Union, streaming platforms are reducing video quality to ensure networks are not overwhelmed and that customers can still view content.



- Advertisers are starting to develop content that speaks to the current situation. The messaging will be increasingly important and sensitive in this situation.



# Practical next steps

TMT leaders will be defined by what they do along the three dimensions to managing a crisis: respond, recover, and thrive. Some key next steps include:

## Technology leaders



- Evaluate the value chain and how disruptions can be mitigated and minimized in future events.



- Drive technology adoption and innovation to support the "future of" scenarios.



- Consider M&A opportunities to enhance and grow technology capabilities.



- Understand demand and supply-side shocks and develop inventory strategies to buffer volatility and risk.



- Implement digitally-enabled future of work tools, including those for business processes and back-office functions.

## Telecom leaders



- Test network reliability.



- Ensure call centers are equipped to handle increases in volume.



- Consider the impact of government stimulus incentives on telcos.



- Assess opportunities for more automation, such as low-/no-touch options for customer-facing processes as well as internal tasks.

## Media & Entertainment leaders



- Assess the impacts on your employees, and your broader network of contractors and external stakeholders. Consult with them for suggestions on how to create content in constrained times.



- Identify approaches that could enable content creation to resume, keeping in mind the wide variation of local and national regulations.



- Consider the availability of government stimulus incentives targeted at media and entertainment companies.





# China's "New Infrastructure" plan underway, empowering TMT industry upgrading

Despite the global spread of the virus, the outbreak has been effectively contained in China. To fight against the virus, China responded swiftly with a "New Infrastructure" construction plan spanning 5G, IoT, AI, cloud computing and data centres. Based on this, various new measures were put in place for prevention and control of the virus and the resumption of work and production—remote working, online education, epidemiological tracking with big data, online medical consultations, contactless CT scans and AI imaging diagnostics—all of which are testimony to the immense potential of the New Infrastructure plan.

The Chinese Government has repeatedly stressed the need to accelerate 5G network deployment and construction of big data centres, and to steadily facilitate the "digital +" and "smart +" upgrading of traditional infrastructure. TMT industry developments are inextricably linked to the state's positioning in New Infrastructure; the outbreak has increased industry attention on tech-oriented acquisitions to ensure asset diversification. Some start-ups could

face challenges such as diminished liquidity, potential valuation declines, and decreases in venture capital and public funding. However, companies with large cash reserves will seek to acquire innovative start-ups that they hope will create new development opportunities. Many companies will consider making long-term network investments, and as 5G becomes faster and more reliable, related investments will take center stage.

As the epidemic has gradually subsided in China, reopening businesses and reviving the economy have become the priorities. Local governments have already announced New Infrastructure investment projects amounting to more than RMB40 trillion. They will continue to speed up progress on these projects, and New Infrastructure sectors will become a crucial driver of technological innovation, facilitating the digitization and upgrading of traditional industries and stimulating economic growth. In the post-COVID-19 era, New Infrastructure will inject renewed energy into China, and even the global economy, reinforcing China's leading position in the global value chain.

Although the Chinese economy has taken a hit from the epidemic, in the long run COVID-19 will be a useful reality check for domestic technological development. With proactive and flexible strategy adjustments, we believe the TMT industry will accelerate its upgrading and vertical development, ushering in a long period of growth backed by the New Infrastructure plan. This will enhance China's innovative development, and become a powerful engine for the high-quality development of the Chinese economy.

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