

**COVID-19**

**Telecommunication, Media and Technology**

Impact on the sector and outlook

April 2020

# Lockdown is impacting businesses and operations in the TMT sector...



## Telecommunication

### Telecom service providers

- The lockdown is expected to result in **reduction in the net addition** of subscribers in March and this **trend could continue in the short term**
- **Dip in overall recharges due to restricted channels, and loss of migrant population. After the initial surge in data consumption, data usage is expected to flatten**
- **Restricted customer call centre services**, network operations, and maintenance

### Telecom infrastructure providers

- **Regular maintenance may be affected** with problems in access to **diesel and manpower**

### Original equipment manufacturers (OEMs)

- **Immediate supply may not be hampered** as OEMs are expected to have **surplus supply capacity** in India compared with demand. Network expansion and roll out impact could affect **future cash flows**.

### Handset manufacturers

- **Envisage significant losses with supply chain disruptions**, likely impacting production especially in the Indian brands utilising Chinese components. Segment might face **significant production losses** in March and April. The **trend could continue in short term**



## Media & Entertainment

### Television

- Viewership **at highest ever levels**
- **Genres like news, movies, and kids** saw significant growth
- **Advertising volumes saw some growth**, overall monetisation is a challenge

### Over the top (OTT) Players

- Significant growth in **news, movies, and gaming**.

### Print and publishing

- **Consumption slowdown** and production is seen to have been hit
- Store closures and potential **disruptions to warehouse and distribution centres**, as well as possible **paper shortages**

### Sports

- **Cancellation of sporting events** is expected to impact sports organisations' revenue, but could **benefit eSports and virtual sports**

### Multiplexes and cinemas

- Amongst the worst hit in the sector, **with potential extension of lockdown, recovery** is expected to be **slow**



## Technology

### Hardware and software

- With increased work from home (WFH), companies who have traditionally been providing desktops are seen switching over to laptops. This is an **opportunity for higher laptop, IT accessories and other mobile devices sales**
- Potential **inflationary impact** due to **supply shortage**, especially for products, components in high demand such as mobile phones, laptops, etc.

### Semiconductors

- **Raw-material supply disruption** is likely to result in delays in delivery; **Disruption to electronics value chain** likely to have an impact on supply of components, creating choke points in board and systems manufacturing

### IT/ ITeS

- **Majority of the Indian IT/ ITeS firms might not be able to support work from home**. Key challenges include - shortage of laptops, OSP license requirements, lack of digital collaboration tools, poor network connectivity, physical server applications/ back up, amongst others
- IT/ ITeS provides **essential services to govt. and other sectors which are impacted**
- **Privacy and security concerns** arising from employees working from home may hinder service delivery

# .....data and content has become the lifeline



## Connectivity

- **Monthly wireless data consumption** per user in India is 10.37GB slated to increase by about **15-20 percent in the next two quarters** if work from home continues. With increase in consumption, subscribers are also seen **upgrading home broadband connections.**
- **Telcos** have enhanced **data thresholds** for home broadband plans (**offering up to 10 Mbps free per user per month**)
- **Mobile service providers have also increased** data limit per day (increased **from 1.5GB to 3GB per day**)
- Overall **increase in digital recharges as a percentage of total recharges**
- Demand for **IPLC, data-centre, CDN** was on the rise which is likely to be further fueled. **API monetisation** business is seeing unparalleled growth.
- However, increase in data consumption could cause **stress in the network** infrastructure



## Content

- Increased opportunity for media content, OTT on account of **live streaming, online education, fitness, and entertainment needs**
- Changes in the content consumption pattern with **3-5 hours increase in streaming per day per user looks like this**
  - **0830-1030 extended to 0830-1130**
  - **2000-2400 extended to 1800-2400**
  - **Increased viewership during lunch 1300-1500**
- **15-20 percent increase in streaming numbers** (primarily videos) since the beginning of March with certain OTTs experiencing **steep increase in subscriptions**
- Significant demand in TV viewership, however low demand for advertisements as production is stalled
- Telecom players are seeing significant **'win-back' of subscribers in DTH business**

### Ensuring availability of communication infrastructure for mission critical services is key

**Increase in data consumption is expected to cause stress on telecom infrastructure.** OTT platforms **urged to reduce bandwidth** to enable critical services. OTT platforms **taking measures to reduce congestion** which include

Distributed edge cache servers

HD to SD migration

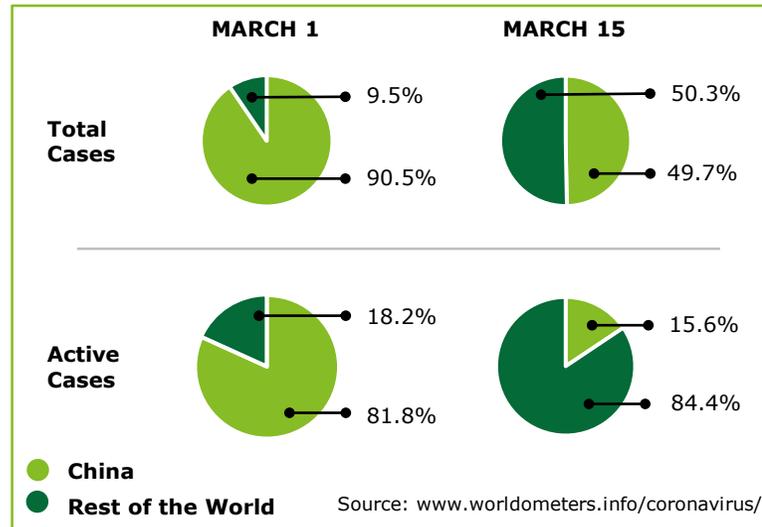
Codecs and compression techniques

Usage monitoring (bandwidth consumption per device)

Limiting adverts and pop up data

# Shift in epicentre of the epidemic – key lessons from China during the crisis

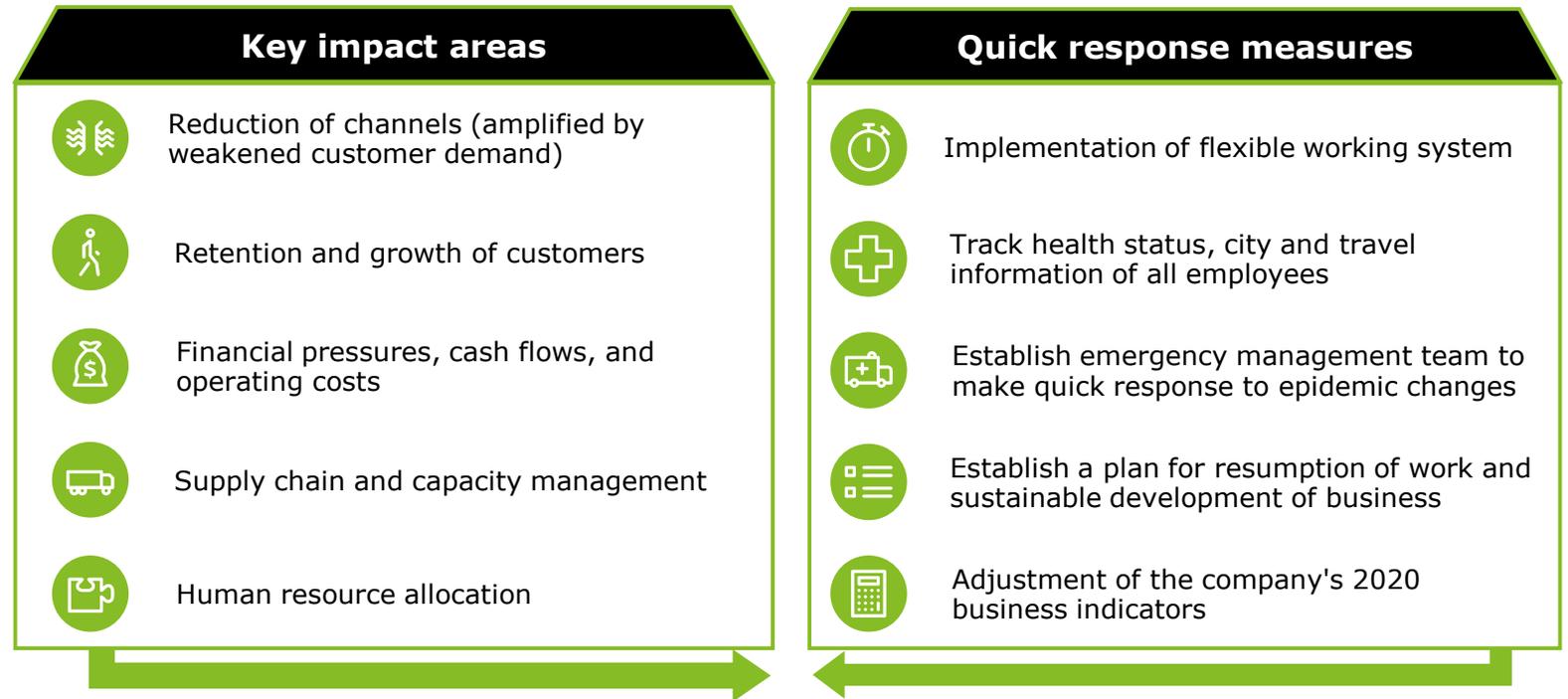
**Figure 1: Change in epicenter of the pandemic<sup>1</sup>**



- In the **first 15 days of March the epicentre of the pandemic shifted from China to Europe** with ~85 percent of the cases in rest of the world apart from China.
- The rest of the world has been reporting more new cases than China since 26 February. (In China, the new cases have been fewer than 40 per day since February)

While the pandemic spread in other countries, China was already on the recovery path. This provides us an opportunity to learn from the actions taken by the TMT sector clients during the pandemic, and measures taken to minimise the impact post COVID-19.

**Deloitte conducted a survey with TMT sector executives in China market to understand the industry's views on the prospects for 2020<sup>2</sup>.**



<sup>1</sup> [www.worldometers.info/coronavirus/](http://www.worldometers.info/coronavirus/)

<sup>2</sup> Deloitte report – TMT Sector Outlook – After the Storm, Confidence Remains

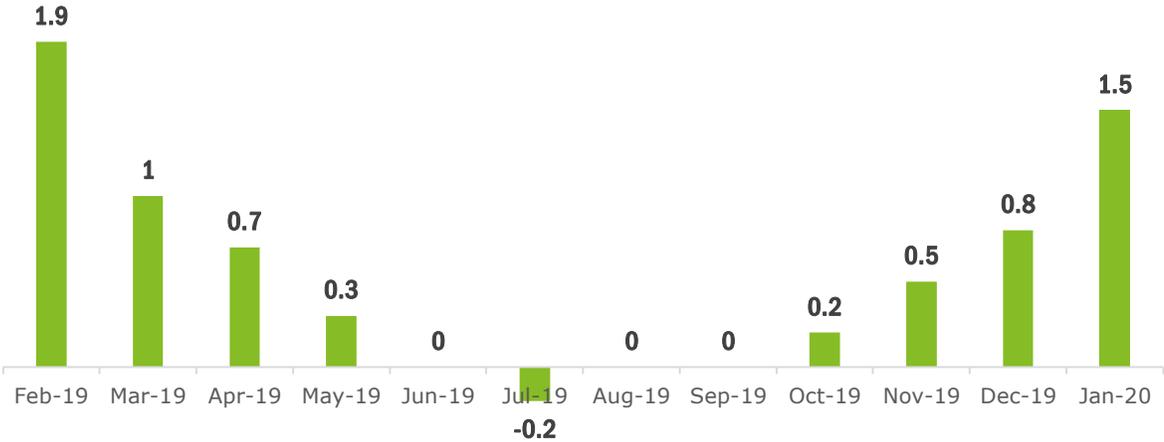
# TMT sector outlook remains optimistic in China as measures are taken to revitalise the business

**Key focus areas to revitalize the business<sup>3</sup>**

-  Cost control and management
-  Accelerate new product launch
-  Strengthen resource distribution and build alliance & ecosystem
-  Layout more online business models
-  Accelerate the digital transformation of enterprises
-  Use new technology to maintain customer service (network / mobile)
-  Optimize the allocation of human resources
-  Strengthen supply chain management

As the country took measures to respond to COVID-19, the **TMT sector, especially telecommunications, emerged as the enabler.**

**Figure 2: Y-O-Y Percentage telecommunication revenue growth – China<sup>4</sup>**



- In January and February, when China was in lockdown, telecommunication revenue **grew 1.5 percent compared with the same time last. This the highest rate of growth in the last 10 months.**
- In China, most TMT sector stakeholders **remain optimistic to meet the business objectives for 2020**, while about a third believe that revenues might be affected slightly (less than 20 percent).

<sup>3</sup> Deloitte report – TMT Sector Outlook – After the Storm, Confidence Remains

<sup>4</sup> Ministry Of Industry & Information Technology, People’s Republic Of China

# Outlook of select segments within TMT markets - Telecoms



## Current Situation

## Outlook

### Service providers



Low - Medium

- Connectivity and data boom, however, **negative impact on subscriber net additions**
- Growth in **IPLC, data centre, CDN business**
- **API monetisation** business is growing
- Telcos experiencing growth in **DTH business (more win-backs)**

- Increased demand likely to create **pressure on capacity**
- Ability to **operationalise online models and digital channels, enhance customer experience through use of technology, strength alliance, and distribution ecosystem** would be key to stabilise business.
- Economic downturn **might have an impact on the financials**

### Infrastructure providers



Low

- Segment recognised for stable annuity revenues
- **Operations and maintenance (O&M) of the towers has an impact on diesel fueling**
- Due to impact on telco services, **allowances might be provided for O&M of towers**

- **Building new towers and deploying new tenancies** might become a challenge which might have an impact on new revenues.
- **Recurring rental revenues will remain stable** with increases due to **increase in site loading**

### Original Equipment Manufacturers



Medium

- Original equipment manufacturers in India currently **have supply capacities to meet the demand,**
- In the **short-term the supply chain disruption** from China might **not have an immediate bearing.**

- **Hindered network rollout activities** would create of backlog for the OEMs. This could hamper future orders.
- Network **managed services hampered,** with only key personnel being allowed to man network operations centres, etc.
- With **future revenues affected,** the challenges might become grave.
- Impact on the private sector might be **mitigated with the increased public sector spending on digital**

### Handset manufacturers



Medium - High

- Reduced **uptake due to lock down**
- **Production losses post lock down may mount due to supply chain disruption** for chipsets and components from China.

- **Customer demand expected to be lukewarm** if the situation continues in lieu of economic slow down
- The **handset manufacturers might face working capital challenges** if the current trend continues
- The **teir-2 handset manufacturers and component assembly** players might be **most suffer the most**

# Outlook of select segments within TMT markets - Media



Current Situation	Outlook
<p><b>Print and publishing</b></p> <p>Severe</p>	<ul style="list-style-type: none"> <li>• <b>Publishing</b> has seen a slowdown in <b>consumption</b>. <b>Production</b> has been hit with store closures, and potential disruptions in warehouse and distribution centres</li> <li>• <b>Publishing and print businesses</b> might <b>enhance focus on digital</b> to minimise losses however, for the <b>small players, evolving alternate business models in quick time might pose its own challenges</b>.</li> </ul>
<p><b>Sports, events, theatre &amp; multiplexes</b></p> <p>Severe</p>	<ul style="list-style-type: none"> <li>• <b>Cancellation of sporting events</b> will have an impact on sports organisations' revenue</li> <li>• Amongst the <b>worst hit in the sector are theatres and multiplexes</b>, suffering from a complete shutdown of business</li> <li>• Post COVID-19 lockdown, the <b>business would be slow to pick pace as gatherings and congregations curbs</b> might continue. These businesses are expected to be slow to recover</li> <li>• This also presents great opportunity for alternate business models and digital enablers like <b>live streaming, eSports, AR/ VR</b> in sports, etc.</li> </ul>
<p><b>Films and Music</b></p> <p>High</p>	<ul style="list-style-type: none"> <li>• Films and music industry <b>has been affected by delayed film movie releases</b></li> <li>• This <b>is further amplified by the public performance income being nullified</b></li> <li>• <b>Direct to TV models are being employed</b> for new releases to curb losses</li> <li>• The business would be <b>slow to pick pace as gatherings and congregations curbs might continue</b>. These businesses are expected to be slow to recover</li> <li>• <b>New creative streams and production models might evolve</b> in future.</li> <li>• The event could serve as trigger to a <b>fast-paced digital transformation, and further evolve live streaming, AR/ VR</b> related business models</li> </ul>
<p><b>Radio</b></p> <p>High</p>	<ul style="list-style-type: none"> <li>• Radio (especially the FM players) are <b>facing significant production and operating losses</b> and might be faced with an <b>existential crisis</b></li> <li>• <b>Continued impact</b> on production and mounting operating losses are likely to have <b>far reaching consequences</b></li> <li>• <b>Industry has sought aid</b> to remain operational</li> </ul>
<p><b>Television</b></p> <p>Medium - High</p>	<ul style="list-style-type: none"> <li>• <b>TV consumption increased by 5-8 percent</b> in the period from beginning to end March with <b>highest increase in news genre</b></li> <li>• Even with increased consumption, broadcasters are staring at a <b>drop in ad revenues (estimated 30-40 percent)</b></li> <li>• <b>Reduced advertising in many top spending categories</b> - auto, consumer durables, retail, and mobile phones</li> <li>• <b>Continued impact on production is likely to affect financials</b>.</li> <li>• <b>Impact of reduced ad revenues</b> would depend on the duration of the lockdown and subsequent impact of <b>economic downturn</b></li> <li>• <b>Emerging sectors like health, insurance, digital and banking expected to mitigate some of the ad revenue losses</b> however, overall the TV broadcasters might face a challenging future in the medium term.</li> </ul>

**Note:** OTT, Streaming services other digital enabled services have largely witnessed unprecedented subscriber growth and demand during this time.

Source: Deloitte analysis

# Outlook of select segments within TMT markets - Technology



## Current Situation

## Outlook

### Hardware/software

- **Segment affected due to lock down and client project cancellations** globally for software services
- Service delivery **impacted due to travel ban**
- 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**

- **Revenues might have an impact due to reduced spending by companies**, globally due to downturn
- **Reduction in discretionary spend** by MNCs might also have an impact on ability to sell projects
- Future of work would **increase the need for security software, collaboration, cloud services, log management and VPN tools, etc.** which might compensate the impact on other software and services to some extent
- **Hardware companies like laptop makers might see boost in topline**



### IT/ITeS

- **Inability to support work from home initially**
- **IT/ ITeS provides essential services to govt. and other sectors which are affected**
- **Delays in project delivery due to inability to meet client security and compliance** requirements in work from home scenarios

- **Challenges encountered in the immediate term would stabilise.**
- Due to enhanced remote work scenarios and extensive stack requirements, **IT departments** are expected to 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.**
- The need for ever-faster access to **data and automation is expected to further boost the segment**



### Semi conductors and equipment

- **Raw-material supplies such as aluminum, copper, and chemicals are affected by disruption**, with delay in delivery by up to a quarter, and possible difficulty in inventorying
- **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**

- In the longer term, **new product schedules might get delayed and product go-to-market strategies may need to be changed** to meet the velocity of the value chain (designs, decisions, etc.)
- Delays could result in **reduced participation in customer meetings, internal meetings, and external events**
- In the long-term, companies may be required to **address the risks of geographical concentration and lack of resiliency to avoid single points of failure, and limit future disruption**



# What can companies do?

## Ensuring sustainability of operations in the immediate term

Most companies may not have considered a pandemic scenario such as this for their business continuity. To prevent further transmission of COVID-19 and protect their people, companies have **now mandated remote/ work from home arrangements**. All travel (domestic and international) has been suspended. **Production and supply chain have been disrupted**.

**In this scenario, companies need to try to ensure sustainability of operations in the immediate term.**



### Response strategy

- Establish a **crisis management office**
- Review **business continuity (BC)/disaster recovery (DR) plans**
- Perform **scenario planning** and **adjust company's 2020 forecast/business projections**
- Establish a **plan for resumption of work** and sustainable development of business
- Quick fire '**digital assessment**', **prioritisation of programmes**, and actionable



### Customer

- In this time it would be important for companies **to communicate with customers, and proactively provide information**
- Frequent **engagement with customers at an executive level** is key to manage expectations
- Setting up **emergency customer call centres**
- '**Be the helping hand**' - Giving customers **additional flexibility** in payments



### Talent & People

- Prioritise **employees' health and safety**
- Implementation of **flexible working system**
- **Track health status, city, and travel information** of all employees
- **Equip your connectivity, security, and infrastructure** for new traffic and use patterns and enable work from home for employees

# What can companies do?

## Ensuring sustainability of operations in the immediate term

Most companies may not have considered a pandemic scenario such as this for their business continuity. To prevent further transmission of COVID-19 and protect their people, companies have **now mandated remote/ work from home arrangements**. All travel (domestic and international) has been suspended. **Production and supply chain have been disrupted**.

**In this scenario, companies need to try to ensure sustainability of operations in the immediate term.**



### Finance and working capital

- Companies would need to **plan for year end closure and compliances**
- **Re-plan cash outflows**
- **Realignment of policies** and **quantification of impact on financial statements**
- Assessing impact on **transfer pricing (e.g. GICs)**
- **Indirect tax benefit** evaluation of **employees working from home**



### Supply Chain & Operations

- **Workforce/ labour planning,**
- Update **inventory policies**, build greater **inbound visibility**, and **build alternate outbound logistics**
- This would be **critical for companies in the sectors engaged in production and assemblies**. E.g, OEMs, smart phone manufacturers, etc.



### Sales and distribution

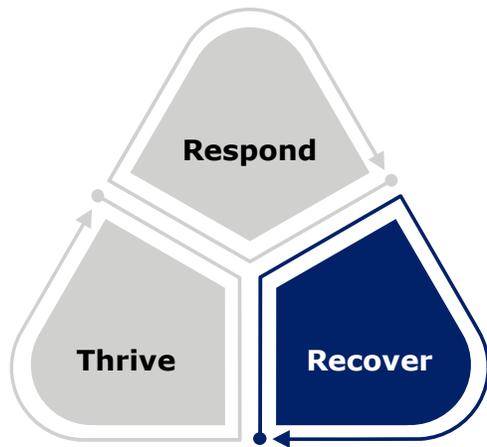
- **Evaluate alternate physical channels** e.g. entities open during lock down - supermarkets, banks, pharmacies, gas stations, agreement with food delivery providers)
- Activate **online business models** - whatsapp, IVR/ dedicated phone line for purchases
- For **high demand items** like **laptop, printers, routers** etc. other IT accessories retail **re-route inventory to facilitate sales through e-commerce platforms**

# What can companies do?

## Navigating volatility and distress

It is important that **businesses are proactive** in assessing their capability to withstand disruption from both financial and **operational standpoint** in the medium term, and that they act decisively to mitigate actual or potential issues.

The company should consider keeping the **employees, customers, suppliers**, and other **value chain players engaged** while **digitally transforming** and laying foundation for **innovative business models**.



### Response strategy

- Accelerate the **digital transformation / expedite new technology roll-outs**
- **Cost control** and management
- **Accelerate new product launch**
- **Increasing customer stickiness** by offers/ discounts (for e.g. telcos increasing data limit at same price points)



### Customer

- **Reviews of ways of working** – SLAs, pricing, waivers etc. may be critical especially for enterprise customers, B2B partners.
- Focus may shift to **outcome based engagements** especially for tech. companies.
- Use new technology to maintain customer service (network/mobile) – **'Think Mobile First'**
- **Accelerating self service options** especially for telcos and OTT providers to help meet customer requirements. **Peer to peer service models may flourish.**



### Talent & People

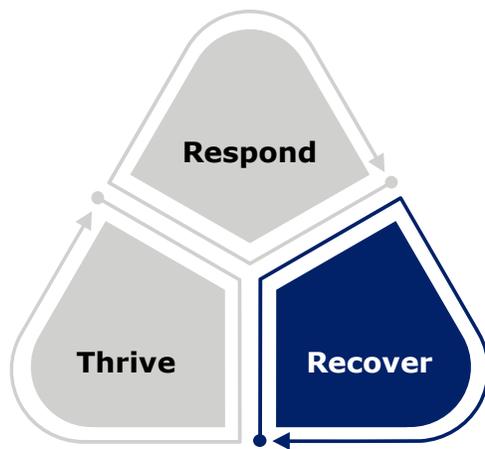
- **Review/amend policies for remote work**, including guidelines on travel, allowing **flexible working arrangements**
- **Plan for absenteeism** through reallocation of work, alternate/ external capacity augmentation
- **Ensure critical resource availability through succession and contingent workforce**
- **Use agile for virtual work**

# What can companies do?

## Navigating volatility and distress

It is important that **businesses are proactive** in assessing their capability to withstand disruption from both financial and **operational standpoint** in the medium term, and that they act decisively to mitigate actual or potential issues.

The company should consider keeping the **employees, customers, suppliers**, and other **value chain players engaged** while **digitally transforming** and laying foundation for **innovative business models**.



### Finance and working capital

- Companies **would need to re-capitalise their businesses** especially in the sector severely impacted such as multiplexes, print, publishing, gear makers, and IT/ ITeS
- Assess contractual risks and related tax implications from contractual claims
- Adjustments to **operating margin changes** based on trends
- True-up/ true down adjustments – **cash flow forecasting and working capital management**
- **Explore opportunities like tele-medicine, and online education (potential incentives, tax benefits)**



### Supply Chain & Operations

- **Radical simplification and automation of work**
- Illuminate the **extended supply chain/understand alternate sources of supply** (alternate sources could exist in your own global supply chain)
- **Planning alternative supply chains, engage with critical suppliers**
- Assess business models to **leverage commercial channels established for retail for technology hardware**



### Sales and distribution

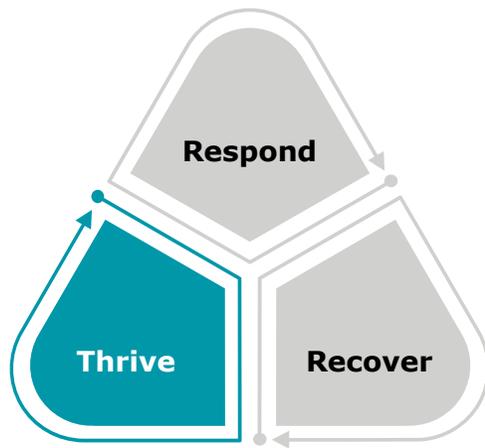
- **Foster non-physical channels/enable digital channels**
- **Replace and strengthen physical channels, e.g., door to door delivery** (greater role of e-commerce players in the supply chain, potentially replacing brand stores)
- **Activate last mile reach** through **innovative models** in India

# What can companies do?

## Imagining future ways of working

This crisis may very well be the inflection point where **technological capabilities transform every facet of work**. Companies are in a unique position to **reimagine the future of work, of the workforce, and of the workplace powered by technology**.

Opportunity to **accelerate the pace of digital transformation** through implementation of **automation, robotics, cloud, and cognitive computing**. By offering **virtualisation, cloud based services, remote work, and enabling collaboration, the workplace can be altered forever**.



### Response strategy

- **Assess digital maturity** and **fast pace programmes**
- **Cloud first approach** enabling elasticity of scaling solutions, quicker time to market, creating self-service solutions for business, and providing sandboxes for experimentation and innovation
- **Autonomics** also has the potential to **re-engineer business process to increase efficiency, quality, speed, and reliance on humans**.



### Customer

- Build **self-service capabilities, allowing access to services from anywhere, anytime, from any device**
- Speeding up **the pace of digitalisation and use of technologies such as artificial intelligence, cloud, and big data to gain competitive advantage**
- **Fully virtualised customer call centre**



### Talent & People

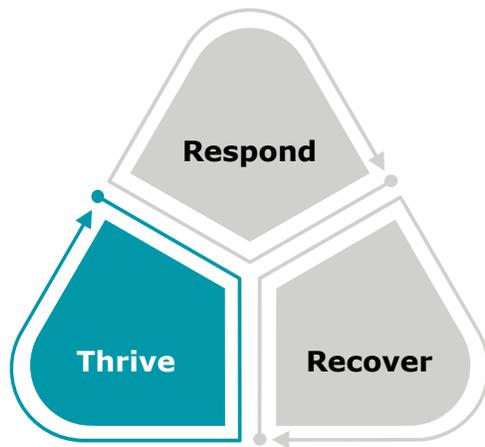
- Maintain **communication channels and employee outreach**
- **Clearly communicate policies, expectations, and procedures**.
- **Investigating and investing in collaboration tools** could allow for easier collaboration, quicker turnaround times, and cost savings as a result of less travel.
- Use of **collaborative workforces may increase** mandating robust project management capabilities
- Enable the **co-dependent IT (e.g. dev-ops) workforce to be self contained**

# What can companies do?

## Imagining future ways of working

This crisis may very well be the inflection point where **technological capabilities transform every facet of work**. Companies are in a unique position to **reimagine the future of work, of the workforce, and of the workplace powered by technology**.

Opportunity to **accelerate the pace of digital transformation** through implementation of **automation, robotics, cloud, and cognitive computing**. By offering **virtualisation, cloud based services, remote work, and enabling collaboration**, the workplace can be altered forever.



### Finance and working capital

- Increased **focus on COEs**
- Consider **strategic M&A opportunities**
- Manage cash flow challenges in these turbulent times through **release of non-core assets monetisation of real estate** (work from home model might prevail)
- **Leverage on technology**, e.g., tax transformation



### Supply Chain & Operations

- Evaluation of new **business models / operating models** and supply chain arrangements
- **Evaluate benefits under make in India/ assemble in India for manufacture of electronic components**
- Leverage on technologies such as Internet of Things (IoT), cloud computing, 5G, AI, 3D printing, and robotics with focus on **enabling the digital supply network of the future**.



### Sales and distribution

- **Rethink established paradigms around physical presence and re-think creating new business models** utilising virtual presence
- **Layout more online business models**



Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee (“DTTL”), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as “Deloitte Global”) does not provide services to clients. Please see [www.deloitte.com/about](http://www.deloitte.com/about) for a more detailed description of DTTL and its member firms.

The information contained in this material is meant for internal purposes and use only among personnel of Deloitte Touche Tohmatsu Limited, its member firms, and their related entities (collectively, the “Deloitte Network”). The recipient is strictly prohibited from further circulation of this material. Any breach of this requirement may invite disciplinary action (which may include dismissal) and/or prosecution. None of the Deloitte Network shall be responsible for any loss whatsoever sustained by any person who relies on this material.