COVID-19
BCG Perspectives

Facts, scenarios, and actions for leaders
Publication #4 with a focus on
Accelerating Digital & Technology Transformation

Version: 1 May 2020
COVID-19
BCG Perspectives

Objectives of this document

COVID-19 is a global societal crisis

We at BCG believe that the COVID-19 outbreak is first and foremost a societal crisis, threatening lives and the wellbeing of our global community. Society now, more than ever, needs to collaborate to protect people's lives and health, manage mid-term implications, and search for lasting solutions.

Leaders need to drive an integrated response to navigate the crisis

It is the duty of health, political, societal, and business leaders to navigate through this crisis. A complex interplay of epidemic progression, medical response, government action, sector impact, and company action is playing out. This document intends to help leaders find answers and shape opinions to navigate the crisis in their own environments. It encourages thinking across the multiple time horizons over which we see the crisis manifesting itself.
Navigating Businesses through the Crisis

**Flatten**

1. Develop Scenario-Based Planning Approach to manage uncertainty

2. Create a Rapid Response and Transformation (RR&T) team

3. Revamp Organization and People for the new normal

4. Drive Topline Security and Customer Trust

5. Stabilize and restart Supply Chain, Manufacturing

6. Restructuring Cost, Managing Cash, & Liquidity

7. Emerge Stronger; drive advantage in adversity

8. Accelerate Digital and Technology transformation

**Fight**

**Future**

Establish crisis management

Navigate through Flatten, Fight, and Future


Note: RR&T = Rapid Response and Transformation Team

Source: BCG

Focus of future edition

Focus of this edition

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Executive Summary | COVID-19 BCG Perspectives

Several countries are currently flattening the curve and all need to be actively ensuring containment

• Globally, about 30% of COVID-19 patients have recovered; case doubling rate improved to 25 days
• Many countries are flattening disease spread curve (i.e. doubling rate > 14 days); risk of resurgence looms, but actions being taken to proactively manage
• Governments are monitoring the situation using multiple means, incl. digital technologies; choices depend on privacy and security considerations

Significant impact on economy, sectors, and business; consumers moving online drives need for accelerated digitization

• Flatten: Shut-down of ‘non-essential’ activities can put estimated 10-30% of economic activity and 15-35% of jobs at risk temporarily¹ (GER, FR, IT, ES, US)
• Fight: 5-20% of economic activity and 5-20% of jobs can be temporarily² at risk—implying protracted economic challenges (GER, FR, IT, ES; US)
• Accelerated movement toward vaccine or treatment at scale could limit Fight phase to 12-24 months
• Economic forecasts indicate significant downturn in 2020; global rebound to pre-COVID levels not expected before 2021
• One-third of consumers plan to increase online spending, especially those living in most affected and urban areas
• Crisis expedites urgency of digital transformation—"more urgent priority" for >75% of companies across industries

COVId-19 crisis may become a step-change moment for digital, together with restructuring efforts across industries

• Many of the behavior shifts we are seeing today are expected to persist beyond the crisis; a huge uptick in digital activities is seen across all industries
• CEOs need to navigate digital imperatives to address near term response to crisis and mid-term resilience

We believe during this crisis leaders need to think along two dimensions:

1. Taking an integrated perspective on health/medical progression, governmental responses, societal reactions, and economic implications to understand business/sector impacts

2. Thinking multi-timescale in a flatten-fight-future logic

¹. Impact only for duration of specific phase (Flatten and Fight). Only accounting for first order effects of microeconomic data and subject to change, e.g. as governments act
Source: BCG
COVID-19 will be a journey with three distinct phases requiring an integrated perspective

**Flatten**

Typically the initial phase after a pandemic outbreak – goal is to urgently limit number of new cases, especially critical care

Social distancing (lockdown) and partial business closures, lead to economic recession with large employment impact

**Fight**

Finding paths to collectively fight the virus, restart the economy, and support society in balancing lives and livelihood

Increasing economic activity with recovering GDP, some business reopenings, and social distancing on sustainable level

**Future**

Disease controlled through vaccine/cure/herd immunity, and treatment within sustainable medical capacities possible

Reactivated economy with strong business rebound and job growth, social restrictions limited or completely suspended

**1. Disease progression, health care system capacity, and response**

**2. Government policies and economic stimulus**

**3. Economic scenarios**

**4. Business engagement and response**

**5. Public engagement and response**

All of the above five factors result in specific economic and social outcomes in each phase

Source: BCG
Guide for leaders

Fresh insights: messages for leaders
This week’s focus: how to accelerate Digital & Technology transformation

Updated epidemic, economic, and business scenarios and impact

Preconditions for restart
Economic impact
Business impact

Appendix: Detailed action areas and further readings

Detailed action areas for business leaders
Further readings
What is happening around the world

From 24 to 30 April 2020

Russia's Coronavirus Cases Surpass China's in Latest One-Day Surge

China aims to launch the world's first official digital currency

Leaders across Europe prepare to ease lockdown

European Commission Launches Big Data Hub for COVID-19 Research

Mint Covid Tracker: India's corona trajectory slowing, with cases doubling in eleven days

Wuhan restarts: Positive trends in the city's recovery

Cuomo Announces Phased Plan to Reopen New York; Deaths Drop

Covid safe: Australian government launches coronavirus tracing app amid lingering privacy concerns

The CovidSafe tracking app is part of the government's strategy to identify, trace and isolate as it looks at life beyond physical distance restrictions
Disease Progression | ~30% reported recoveries\(^1\) globally so far; case doubling rate improves to 25 days

As of 29 April 2020

Days of doubling cases:
- 0-3 days
- 3-6 days
- 6-14 days
- 14-30 days
- >30 days

183
Countries with cases\(^3\)

3.2M \([\Delta 3\%]^4\)
Confirmed cases globally

228k \([\Delta 3\%]^4\)
Fatalities globally

Note: Continued cases and fatalities are subject to different testing, propensity, reporting standards and hence imperfect measures
1. Refers to total reported recoveries as a percentage of total reported infections (cases) 2. No. of doubling days based on 7 day CAGR 3. Basis Johns Hopkins CSSE 4. Daily growth rate basis 7 day CAGR 5. Community transmission defined basis WHO - countries experiencing larger outbreaks of local transmission on basis of decided factors
Source: Johns Hopkins CSSE, Our world in data, WHO situation reports, BCG analysis
Disease Progression | Many countries are flattening the curve

As of 29 April 2020

Flatten

Daily growth rate of total cases (seven-day average)

Rates improving from top to bottom

0% 2% 4% 6% 8% 10% 100 1,000,000

Cumulative number of confirmed cases (log scale)

Cases doubling: 10 days

Asia 1

Europe

North America

South America

Africa

Cases doubling: 14 days

Cases doubling: 21 days

Total cumulative number of confirmed cases (log scale)

for countries 2 with doubling rate > 14 days

0 100 1,000 10,000 100,000 1,000,000

Number of days

1. Includes Middle East
2. Countries selected from the chart on the left
3. # of days after exceeding 100 confirmed cases
Source: Johns Hopkins CSSE, Our World in data, WHO situation reports
Disease Progression | Risk of resurgence but actions being taken

Previous pandemics like MERS and the Spanish Flu had disease resurgence two or three times

**Spanish Flu**

UK Deaths per 1,000 persons

- 1st wave
- 2nd wave
- 3rd wave

**MERS**

Number of monthly cases worldwide

- 2014 outbreak in Middle East
- 2015 outbreak in Korea

### As of 29 April 2020

#### Daily infections by country

![Graph showing daily infections by country from 23-Feb to 29-Apr 2020](image)

- # of confirmed cases

#### Measures to curtail resurgence

**Japan**

- Employers to reduce the number of employees in workplaces by 70%
- Facilities housing education, exercise, exhibitions, and recreation have been asked to close
- 14 countries added to entry-ban list (in addition to 70+ countries); restrictions extended to end of May

**Hong Kong**

- Ban on gatherings of 4+ people extended to 7 May; fines up to $25k for violators
- Closure of bars, pubs, gyms, leisure, and outdoor activities until 7 May
- Extension of immigration restrictions (14 days’ compulsory quarantine) by 1 month to 7 June

Source: John Hopkins CSSE, Press Search, BCG Henderson Institute Analysis
**Government Response | Widespread use of digital technologies in crisis response; choices depend on privacy and security considerations**

As of 29 April 2020

<table>
<thead>
<tr>
<th>Detect</th>
<th>Alert</th>
<th>Track &amp; Trace</th>
<th>Community Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of technologies (IoT, Analytics, Robotics, Imaging) to aid detection of cases based on physical symptoms, history</td>
<td>Use of communication tech (Chat-bots, Webpages) to share information including disease alerts, treatment, and testing centers</td>
<td>Use of modern computing (GPS, Bluetooth) to trace contact with patients/high-risk individuals</td>
<td>Coming together of the community (individuals, local groups, organizations and scientific community) on crisis response</td>
</tr>
</tbody>
</table>

**Select examples**

- **China**
  - Smart robot patrols
- **UK**
  - C-19 symptom tracker
- **Vietnam**
  - NCOVI health monitoring
- **Australia**
  - Coronavirus Australia app
  - GOV.UK Notify portal
- **Singapore**
  - FluGoWhere website
- **South Korea**
  - Corona 100m app
- **India**
  - Aarogya Setu app
- **Australia**
  - COVIDSafe app
- **Ireland**
  - MyWelfare portal
- **Singapore**
  - MaskGoWhere portal
- **USA**
  - AI enabled research dataset
  - Big data hub for R&D
- **South Korea**
  - AI enabled research dataset

**Collaboration**

- Use of technologies (AI, Big Data, Performance Computing) to enable collaboration across boundaries

Source: BCG

*Deep dive on next page*
**COVIDSafe**

Australia's contact tracing solution

**Key features**

- **Voluntary use only**
- **Limited data** captured\(^1\)
- **Stored on app** for 21 days only\(^2\)
- **Double consent required** before sharing
- **APIs**\(^3\) from Google and Apple **not leveraged**

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**As of 29 April 2020**

<table>
<thead>
<tr>
<th>Will <strong>use</strong> of the application be mandatory or optional?</th>
<th>Optional</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will the application record any <strong>location data</strong>?</td>
<td>No location data recorded</td>
<td>Location data recorded</td>
</tr>
<tr>
<td><strong>What personal information will be collected by the app?</strong></td>
<td>Phone number only</td>
<td>Phone num. &amp; basic data</td>
</tr>
<tr>
<td>Where will the <strong>data be stored?</strong></td>
<td>Local on device</td>
<td>Hybrid</td>
</tr>
<tr>
<td>Who will <strong>decide to upload</strong> the data?</td>
<td>Citizen makes decision to upload data</td>
<td>Data uploaded automatically</td>
</tr>
<tr>
<td>How will potentially exposed citizens be <strong>notified?</strong></td>
<td>Manually via phone call</td>
<td>Automatically via SMS or In App Notification</td>
</tr>
</tbody>
</table>

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1. Name, age range, postcode, mobile number  
2. Bluetooth, with anonymous reference identifiers  
3. Application Programming Interface  
4. For example DOB, address and/or travel history in addition to basic demographics  

Source: Publicly available media and government websites
Government Response | South Korea example—focus on building a connected and comprehensive track and trace solution

As of 29 April 2020

**Smartphone app**
- GPS tracking and location-based alert
- Enables symptom reporting and contact with case workers

**Tracking wristbands**
- Connects to apps via Bluetooth
- Alerts officials if person leaves the home or destroys the band

**Video surveillance**
- CCTV cameras enable contact identification
- High density of tracking: 1 camera per 6.3 people

**Credit card transactions**
- System tracks movements based on credit card transaction data
- Data submitted by 22 credit card operators in 10 minutes

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1.Travel history in addition to demographics and phone number
Source: Reuters: Ahead of the curve: South Korea’s evolving strategy to prevent a coronavirus resurgence, 15 April 2020; The Straits Times: Coronavirus: South Korea to strap tracking wristbands on those who violate quarantine orders, 11 April 2020; The Korea Herald: South Korea’s best method of tracking COVID-19 spread: credit card transactions, 9 April 2020; The Conversation: Coronavirus: South Korea’s success in controlling disease is due to its acceptance of surveillance, 16 April 2020; App Annie data base; Google Play store; Press research, BCG
Five key questions will shape the economic outcomes

1a: What will be the LENGTH of "Flatten"?
What are the preconditions to transition? When will we achieve them?

1b: To what DEPTH does the economy drop in "Flatten"?

2a: What will be the LENGTH of "Fight"?
What are the preconditions to transition? When will we achieve them?

2b: What LEVEL of recovery does the economy achieve in "Fight"?

3: Where does the economy return to relative to the pre-COVID era in "Future"?
Economic starting point | Understanding of countries' sector composition critical to estimate direct negative impact of reduced contact

As of 27 April 2020

<table>
<thead>
<tr>
<th>Revenue by sector (%)</th>
<th>Employment by sector (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td></td>
</tr>
<tr>
<td>Groceries &amp; Health care providers, etc</td>
<td>65%</td>
</tr>
<tr>
<td>UK</td>
<td></td>
</tr>
<tr>
<td>Groceries &amp; Health care providers, etc</td>
<td>68%</td>
</tr>
<tr>
<td>France</td>
<td></td>
</tr>
<tr>
<td>Groceries &amp; Health care providers, etc</td>
<td>54%</td>
</tr>
<tr>
<td>Italy</td>
<td></td>
</tr>
<tr>
<td>Groceries &amp; Health care providers, etc</td>
<td>66%</td>
</tr>
<tr>
<td>Spain</td>
<td></td>
</tr>
<tr>
<td>Groceries &amp; Health care providers, etc</td>
<td>57%</td>
</tr>
<tr>
<td>US</td>
<td></td>
</tr>
<tr>
<td>Groceries &amp; Health care providers, etc</td>
<td>53%</td>
</tr>
</tbody>
</table>

Government employment does not include health care in EU countries to maintain comparison with US
1. European figures reflect gross output by sector, which is analogous to revenue by sector. US figures directly reflect revenue by sector.
Source: Eurostat Database; St. Louis Fed Reserve; O*NET; American Community Survey; other country-specific sources available on request; BCG COVID response teams; BCG Analysis
Impact during 'Flatten' | Shutdown of 'non-essential' activities can put estimated 10-30% of economic activity and 15-35% of jobs temporarily at risk

As of 27 April 2020

<table>
<thead>
<tr>
<th>Country</th>
<th>Impaired economic activity(^1) during 'Flatten' phase</th>
<th>Impacted employment during 'Flatten' phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>~30-15%</td>
<td>~30-15%</td>
</tr>
<tr>
<td>UK</td>
<td>~25-10%</td>
<td>~30-15%</td>
</tr>
<tr>
<td>France</td>
<td>~30-15%</td>
<td>~30-15%</td>
</tr>
<tr>
<td>Spain</td>
<td>~30-15%</td>
<td>~30-15%</td>
</tr>
<tr>
<td>US</td>
<td>~30-15%</td>
<td>~30-15%</td>
</tr>
</tbody>
</table>

\(^1\) Preliminary figures – ONLY first order effect of microeconomic data during Flatten phase. Economic impact also depends on length of suppression.

**Disclaimer:** These analyses represent only potential scenarios based on discrete data from one point in time. They are not intended as a prediction or forecast and the situation is changing daily. Figures shown only reflect economic activity "directly displaced" by effect of virus. However, multi-order impacts and the impact of government spending and stimulus not considered.

Note: Numbers are rounded to nearest 5%. Gov’t employment does not include health care in EU countries to maintain comparison with US.

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Source: Eurostat Database; St. Louis Fed Reserve; O*NET; American Community Survey; other country-specific sources available on request; BCG COVID response teams; BCG Analysis
Impact during 'Fight' | 5-20% of economic activity and 5-20% of jobs can be temporarily at risk—implying protracted economic challenges

As of 27 April 2020

Preliminary figures – ONLY first order effect of microeconomic data during Fight phase. Economic impact also depends on duration of Fight phase.

**Impaired economic activity** during 'Fight' phase
Estimation in private sector relative to pre-COVID in %

<table>
<thead>
<tr>
<th>Country</th>
<th>Base case</th>
<th>Lower bound case</th>
<th>Upper bound case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>~15-5%</td>
<td>-30%</td>
<td>0%</td>
</tr>
<tr>
<td>UK</td>
<td>~20-5%</td>
<td>-20%</td>
<td>0%</td>
</tr>
<tr>
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<td>-20%</td>
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</tbody>
</table>

**Impacted employment during 'Fight' phase**
Estimation across the economy in %

<table>
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<tr>
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<th>Lower bound case</th>
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</tr>
</thead>
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<tr>
<td>Germany</td>
<td>~20-5%</td>
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Source: Eurostat Database; St. Louis Fed Reserve; O*NET; American Community Survey; other country-specific sources available on request; BCG COVID response teams; BCG Analysis
Duration of Fight | Accelerated movement toward vaccine or treatment at scale could limit Fight phase to 12-24 months

As of 19 April 2020

**Current status**

**Vaccine**
- Multiple vaccines (e.g. Moderna, CanSino, AstraZeneca) in Phase 1 trials
- Simultaneously, investments being made in manufacturing capacity
- Likely about 12 months to earliest FDA-approval
- Likely to take 4-6 months post-approval to full implementation

**Treatment**
- Anti-viral therapies potentially available at scale in Q4-2020—however, likely only used for more advanced cases
- Antibodies from recovered patients currently being tested—use will be limited to small scale/at-risk groups

**Herd immunity**
- Potentially could achieve herd immunity through exposure to disease and subsequent recovery
- Would require 60-70% of population to acquire and recover

**Estimated timeline**

**April '21 – April '23**
(12-36 months)
12-month development "best case", then likely to require time to scale across population

**Oct '20 – April '22**
(6-24 months)
If first round of drugs being tested succeeds – then 6-9 months; if not – substantially longer

**Substantial**
Would likely involve "pulsing" economy on / off, but always maintaining case loads below care capacity

Source: BCG analysis; Morningstar
Consumer Sentiment | One-third plan to increase online spending next month, especially those living in most affected and urban areas

As of 27 April 2020

### Observations

**One third of consumers** plan to increase online spending next month

Resident of **more affected areas** to increase online spending more than those of less affected areas

**Urban areas** see stronger increase in online spending than suburban or rural areas

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1. Urban areas are those with more than 3,000 people per square mile
2. Suburban areas are those with from 1,000 to 3,000 people per square mile
3. Rural areas are those with less than 1,000 people per square mile

Note: "Most affected areas" are the top 10 states by local number of confirmed COVID-19 cases, according to CDC statistics as of April 20, 2020; “Less affected areas” are the other 40 states and Washington, DC. Source: BCG COVID-19 Consumer Sentiment Survey, April 10–12 2020 (N = 2,960 US); unweighted, representative within ±3% of US census demographics
Pre-crisis, digital capability investments have been top priority

As of 29 April 2020

Now, >75% of companies plan to accelerate digital transformations

Investor views on priority areas companies should aggressively invest in:

- Digital Capabilities or Tech Stack: 50%
- Research & Development: 44%
- Marketing & Sales: 41%
- Other Innovation: 38%
- Mergers & Acquisition: 34%
- Emerging Markets: 31%
- Divestitures and/or Spin-Offs: 29%

Respondent views on priority of digital transformation post crisis:

- All industries: 77% More urgent, 14% No change, 9% Lower priority
- Technology, Media, Telco: 82% More urgent, 4% No change, 14% Lower priority
- Energy: 82% More urgent, 18% No change, 6% Lower priority
- Industrial Goods: 81% More urgent, 14% No change, 6% Lower priority
- Public Sector: 75% More urgent, 17% No change, 8% Lower priority
- Financial Institutions: 74% More urgent, 21% No change, 5% Lower priority
- Consumer: 67% More urgent, 33% No change, 5% Lower priority
- Health care: 58% More urgent, 25% No change, 17% Lower priority

Note: DSR Digital Transformation 2020 Survey still ongoing with n=121; BCG 11th annual investor survey 2019 with n=251
1. Respondents were asked what percentage of companies should be more aggressive in pursuing the following strategies for value creation

Source: BCG 11th annual investor survey 2019 (Published 12 Feb 2020); DSR Digital Transformation 2020 Survey, BCG
COVID-19 crisis is a step-change moment for digital and technology transformation

The time to accelerate digitization is now

Many of the behavior shifts we are seeing today are expected to persist beyond the crisis
A huge uptick in digital activities is seen across all industries and all parts of the value chain

Business leaders need to navigate two imperatives

1) In the short-term, embrace digital and analytics solutions to help manage the crisis and succeed during turbulent times
   • Apps like 'Safe@Work' can help companies safely manage operations
   • Digitizing analog business models has immediate impact

2) In parallel, accelerate digital and technology transformation to become more resilient and take advantage of the new reality
   • Key to winning is intertwining human and technological capabilities
   • Digital levers with significant impact on near- and mid-term performance
Many of the behavior shifts we are seeing today are expected to persist beyond the crisis

Current behavior shifts toward digital activities…

- Use of technology increased to replace traditional in-person services; UK telemedicine to see "ten years of change in one week"¹
- Use of Zoom and Slack increased; more new users for Zoom YTD than total 2019², for Slack +140% in Q1 2020 compared with Q4 2019³
- Tracking and tracing of individuals via cell-phones implemented to prevent further virus spread⁴
- Timely location-specific health guidance via digital apps disseminated, allowing organizations to adapt to local situations⁵
- Offline marketing campaign dollars reinvested into digital marketing, online-to-offline platforms, and e-commerce⁵

…providing opportunity for persistent market change

- Customers more comfortable with digital interactions
- Remote and virtual working models proliferating
- Data-driven and AI-powered decision making increased, using granular, real-time information
- Adaptive management practices more prevalent, building on collaboration and rapid decision making
- Fortified technology platforms emerging

A huge uptick in digital activities is seen across all industries and all parts of the value chain.

### Examples of digital actions taken by companies in various industries

**Marketing/Sales**

<table>
<thead>
<tr>
<th>Action</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blockchain to expand customer reach</td>
<td>Financial Service Provider used blockchain to enable small/medium enterprises in contactless bidding for bank loans</td>
</tr>
<tr>
<td>Process refocus to stay in operation</td>
<td>Bank moved large parts of the loan handling process online to minimize loan defaults</td>
</tr>
<tr>
<td>Partnering to retain staff jobs</td>
<td>Retailer shared idle staff with online-to-offline retailers to keep staff employed</td>
</tr>
</tbody>
</table>

**Operations**

<table>
<thead>
<tr>
<th>Action</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty programs to increase e-sales</td>
<td>Beverage producer shifted to e-commerce, linked home delivery with loyalty program to drive repeat purchases</td>
</tr>
<tr>
<td>Analytics tool to coordinate response</td>
<td>Retailer used advanced analytics to simplify local store assortment and better respond to demand changes</td>
</tr>
<tr>
<td>Robotics technology to treat patients</td>
<td>Hospital staffed wards with 5G-powered robots to alleviate the strain on human personnel</td>
</tr>
</tbody>
</table>

**People**

<table>
<thead>
<tr>
<th>Action</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing/sales refocus to boost online</td>
<td>Retailer closed all stores and focused on digital marketing/sales, leading to +30% rise in online orders for the quarter</td>
</tr>
<tr>
<td>Construction to fulfill e-commerce</td>
<td>Financial Service Provider used blockchain to enable small/medium enterprises in contactless bidding for bank loans</td>
</tr>
<tr>
<td>Social media to incentivize workers</td>
<td>Underwear company used WeChat to coordinate employee engagement in increasing sales within social circles</td>
</tr>
</tbody>
</table>

Source: Press releases; BCG
Business leaders need to navigate two digital and technology imperatives to steer through the crisis, and win in the new reality.

**Flatten**
- How do we ensure the safety of our employees?
- How do we move quickly to a remote working model?
- How do we ensure continuity of supply and operations?
- How do we manage costs and ensure liquidity?
- How do we address current customer needs?

**Fight**
- How do we restart?
- How do we win with new customer behaviors, channels?
- How do we manage costs and ensure liquidity?
- How do we make decisions amid uncertainty?
- What tech and people foundations need to be built?

**Future**
- How do we ensure ongoing resilience?
- How do we build more adaptive organizational models?
- How can we step-change operational efficiencies?
- How do we strengthen connections with our customers?
- How do we change our business, market, industry for growth?

**Immediate Digital Accelerators:** Embrace digital and analytics solutions to help manage the crisis (top and bottom line) and succeed during turbulent times.

**Digital & Technological Transformation:** Accelerate digital and technology transformation to become more resilient and take advantage of the new reality.
Immediate Digital Accelerators | Apps like 'Safe@Work' can help companies safely manage operations

Note: Features are illustrative and require clients’ local regulatory and compliance review. You have to make your own assessment on health & safety, privacy and other regulatory, compliance or corporate policy requirements for use and implementation of Safe@Work

Source: BCG
Immediate Digital Accelerators I Digitizing (parts of) analog business models has immediate impact

<table>
<thead>
<tr>
<th>Industry</th>
<th>Context</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational institutions</td>
<td>Locked-down schools in multiple countries</td>
<td>Shifted physical education classes to home schooling</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Used video conferencing tools to engage with students</td>
</tr>
<tr>
<td>Cosmetic retailer</td>
<td>Closed physical retail stores to limit infections</td>
<td>Redeployed beauty advisors as online influencers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leveraged digital tools to engage customers virtually</td>
</tr>
<tr>
<td>Financial service provider</td>
<td>Increased demand for health care services</td>
<td>Enhanced digital solutions to attract new customers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expanded digital insurance offer to include telemedicine</td>
</tr>
<tr>
<td>Beverage producer</td>
<td>Restricted customer access to bars and restaurants</td>
<td>Shifted to omni-channel distribution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Promoted DJ livestreams, e-gaming events, and influencers</td>
</tr>
<tr>
<td>Automotive manufacturer</td>
<td>Limited physical contact outside of home</td>
<td>Launched touchless delivery to reduce interaction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Offered webcam-based customer service</td>
</tr>
</tbody>
</table>

Source: Press releases; BCG

Impact

China Example

45M downloads in 42 days of top six education apps

200% growth in online sales compared with the prior year’s sales

+52K new customer sign-ups a day in its peak

40% beer sales increase on delivery partner e-commerce platform

~12,700 cars sold in March – highest ever monthly sale
Digital & Technology Transformation Journey

Immediate digital accelerators ...           ... seeding ...           ... full digital and technology transformation

**Outcomes**
- Lighthouse control tower
- Follow customer online, digital marketing
- Return to work, track and trace, remote working
- Data-driven supply chain stabilization
- Cost reduction through digital

**Tech**
- Tech resilience and cyber security
- Tech portfolio reset
- Customer experience: New E2E customer journeys, personalization and digital marketing, next gen sales
- Operations: full digital supply chain, factory of the future, digital support functions
- New digital products, services, businesses
- AI@Scale

**People**
- Adaptive response management
- Upskilling bootcamps
- Accelerated data and digital platforms (DDP)
- World-class tech function
- Agile@scale and platform organization
- Digital skill building at scale (BOT)

Source: BCG
Digital & Technological Transformation | Digital levers drive significant impact on near and mid term performance

- **Customer offer & Go-to-Market**
  - Dynamic pricing at a personalized level
  - Rapid product development via virtual prototypes
  - …

- **Operations**
  - Optimization of inventory with data & analytics
  - Predictive quality control & maintenance with AI
  - …

- **Support functions**
  - Automation of processes with RPA & AI
  - Use of AI chat bot to improve customer service
  - …

- **Changing ways of working**
  - Build tech & engineering capabilities
  - Selectively insource critical skills
  - …

- **Leveraging the Power of data & tech**
  - Simplify data & application landscape
  - Optimize IT infrastructure and migrations to S4 Hana/cloud
  - …

**Example digital levers**

- Mid-term EBIT impact
- Revenue uplift

Source: BCG analysis
Guiding principles for leadership in crisis

“THESE are the times that try men's souls. The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of their country; but he that stands by it now, deserves the love and thanks of man and woman. Tyranny, like hell, is not easily conquered; yet we have this consolation with us, that the harder the conflict, the more glorious the triumph.”

Thomas Paine, The Crisis

Be visible, purposeful, and authentic
Communicate in ways that engage and increase the relevance of your teams and clarify the reasons underlying your communications

Leverage the principle of “commander’s intent"
Share only key objectives and rationale of required actions to allow the organization to be flexible and adaptive, and allow a focus on execution

Use multiple clock-speeds
Think on multiple timescales by considering the now, the next, and the later. Ensure that leadership teams look ahead and prepare for the future

Engage externally
Communicate with customers and stakeholders to gather frequent, fresh, firsthand information to adapt and respond effectively

Cut through bureaucracy
Assemble a multi-functional task force that is empowered to make decisions and suspend normal decision protocols

Keep imagination alive
Look out for new needs and opportunities to serve clients now and beyond the crisis. We will not be reverting to a 2019 reality

Source: When Leadership Matters Most, BCG Henderson Institute
Guide for leaders
Fresh insights: messages for leaders
This week’s focus: how to accelerate Digital & Technology transformation

Updated epidemic, economic, and business scenarios and impact
Preconditions for restart
Economic impact
Business impact

Appendix: Detailed action areas and further readings
Detailed action areas for business leaders
Further readings
Updated epidemic, economic, and business scenarios and impact

### Preconditions for restart
- Some countries need to continue monitoring the case growth closely (cases doubling under 14 days)
- Currently available serological tests too unreliable to provide strong solution
- Business readiness across health protocols and workplace safety key to ensuring smoother transition during restart

### Economic impact
- Economic forecasts continue to point to significant downturn in 2020—global rebound to pre-COVID levels not expected before 2021
- US: Peak of unemployment insurance claims ten times higher than in the financial crisis

### Business impact
- Stock markets have currently stabilized after unprecedented drop
- TSR\(^3\) has rebounded over last month but impact visible across many sectors; no sector at pre-crisis level
- Credit risk continues to be a concern for majority of sectors
- Majority of companies negatively affected—yet some companies in each sector manage to emerge much stronger
Leaders need to get the preconditions for restart right

### Health care readiness

- **Disease progression**
  - Control of virus impact in terms of case growth rate, environmental factors\(^1\), and disease impact
  - Leading indicator that measures are effective, public health is protected

- **Health care capacity**
  - Adequate supply of hospital beds, ventilators, ICUs, PPE, trained staff, new treatments
  - Capacity sufficient to care for COVID-19 and other health needs

- **Virus monitoring**
  - Widespread and private virus testing; contact tracing, tracking, and isolation
  - Testing to inform decisions, resource allocation, and outbreak resolution

### Public/economic readiness

- **Business preparation**
  - Workplace health protocols and business readiness
  - Businesses ensure workplace safety for those returning to work

- **Public response**
  - Training and availability of hygiene products; civil awareness, compliance rates
  - Public educated and empowered to adhere to guidelines, to play role in containment; societal response\(^2\)

- **Government preparation**
  - Leadership capacity, policy framework for public health, sectors, and economy
  - Leadership capacity and decision-making on policy; clear guidance and expectations

---

1. Environmental factors: population density, demographics (age, health conditions), weather, etc.; mixing from other localities
2. Societal response: physical distancing, gatherings, intergenerational living, mass transit usage, shopping behavior, etc.

Source: BCG analysis
Some countries need to continue monitoring the case growth closely (cases doubling under 14 days)

As of 29 April 2020

Note: For doubling days, round off values calculated based on last 7 days CAGR of total confirmed cases. 1. Includes Middle East

Source: Johns Hopkins CSSE, Our World in data, WHO situation reports
Currently available serological tests too unreliable to provide strong solution

Two test types available for Covid-19 that differ in what they detect and how well they detect

"Gold standard" molecular tests provide the most accurate detection of the virus genetic material (RNA), typically from respiratory swabs, and can detect the virus before symptoms appear.

Serological tests detect the human immune response to the virus about one week from when symptoms appear; many "rapid" serology tests launched vary significantly in accuracy relative to molecular tests.

Illustration: Implications of Accuracy for Covid-19 Testing

Base data: 100,000 tests performed; 5% disease prevalence

<table>
<thead>
<tr>
<th>Sick patients = 5,000</th>
<th>Healthy patients = 95,000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>False Negative Patients</strong> (sick patients misdiagnosed negative)</td>
<td><strong>False Positive Patients</strong> (healthy patients misdiagnosed positive)</td>
</tr>
<tr>
<td>0</td>
<td>950</td>
</tr>
</tbody>
</table>

### Current Molecular "gold standard" test
- **Sensitivity**: 98%
- **Specificity**: 99%
- **Detection**: ~2-4 days before symptoms

### Rapid finger-stick serology
- **"High quality"**
  - **Sensitivity**: 75%
  - **Specificity**: 95%
  - **Detection**: ~6-10 days after symptoms
- **"Low quality"**
  - **Sensitivity**: 30%
  - **Specificity**: 60%
  - **Detection**: ~6-10 days after symptoms

---

3,500 Sick patients = 5,000 Healthy patients = 95,000

- Misdiagnosed infectious people do not isolate and propagate infection further

- False Negative Patients (sick patients misdiagnosed negative): 100
- False Positive Patients (healthy patients misdiagnosed positive): 950
- A positive serology test result (true or false positive) that suggest an active COVID-19 infection will need a confirmatory molecular test

Note: Serology tests detect active COVID-19 infection starting ~6-10 days after symptoms appear (IgM earlier, IgG later), or previous exposure to the virus (IgG only). 1. Roughly equivalent to US nationwide daily throughput as of March 31, 2020 2. The Guardian (Coronavirus test kits withdrawn in Spain over poor accuracy rate, March 27, 2020)

Source: Expert interviews; BCG analysis
Business readiness across health protocols and workplace safety key to ensuring smoother transition during restart

- Face masks
- Hand sanitizer
- Revised social norms
- Thermal imaging
- Tracking & tracing
- Special cleaning teams
- Remote working
- Care for the sick
- Physical separation (e.g., non-overlapping shifts)
- Paid sick leave
- Remote working
- Good morning!
- OK
- DO YOU FEEL SICK?
- TEMPERATURE
- John Doyhle
- PRECONDITIONS FOR RESTART
Economic forecasts continue to point to significant downturn in 2020—global rebound to pre-COVID levels not expected before 2021

As of 28 April 2020

GDP growth forecast vs. baseline

<table>
<thead>
<tr>
<th>2020</th>
<th>2021</th>
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</thead>
<tbody>
<tr>
<td>-10%</td>
<td>-10%</td>
</tr>
<tr>
<td>-8%</td>
<td>0%</td>
</tr>
<tr>
<td>-6%</td>
<td>2%</td>
</tr>
<tr>
<td>-4%</td>
<td>4%</td>
</tr>
<tr>
<td>-2%</td>
<td>6%</td>
</tr>
<tr>
<td>0%</td>
<td>8%</td>
</tr>
<tr>
<td>2%</td>
<td>10%</td>
</tr>
</tbody>
</table>

US

- Forecasts -5.9%
- Baseline 2.0%
- Forecast range

China

- China’s own forecast -7.5%
- Baseline 6.0%
- Forecast range

Europe

- Germany’s own forecast -6.3% (29 Apr)
- Baseline 1.3%
- Forecast range

India

- India’s own forecast 1.9%
- Baseline 5.8%
- Forecast range

Japan

- Japan’s own forecast -5.2%
- Baseline 0.7%
- Forecast range

GDP level forecast

EOY 2021 vs. EOY 2019

- US: 96-103%
- China: 107-112%
- Europe: 95-101%
- India: 106-112%
- Japan: 96-100%

Note: As of reports dated 31 March 2020 to 28 April 2020, YoY forecasts: 1. Announced by the German Federal Ministry for Economic Affairs and Energy on 29 Apr 2020. 2. Range calculated with 25th & 75th percentile values of forecast range. 3. Range from forecasts (where available) of International Monetary Fund, J.P. Morgan Chase; Morgan Stanley; Bank of America; Fitch Solutions; Credit Suisse; Danske Bank; ING Group; HSBC. Source: German Federal Ministry for Economic Affairs and Energy; Bloomberg; IMF; BCG analysis.

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US:
Peak of unemployment insurance claims ten times higher than in the financial crisis

As of 30 April 2020

Initial US unemployment insurance claims

Total of 30M¹ unemployment insurance claims during last 6 weeks (weeks of 21 March – 25 April)

1. Unemployment insurance claims of 3.3M (21 Mar), 6.9M (28 Mar), 6.6M (4 Apr), 5.2M (11 Apr), 4.4M (18 Apr), & 3.8M (25 Apr)
Stock markets have currently stabilized after unprecedented drop

As of 27 April 2020

Global equity markets varying around a lower mean

- Markets looked past virus’ spread in China
- Inflection with virus’ spread to Europe, US, and beyond

Cumulative returns (%)

Feb 21

<table>
<thead>
<tr>
<th>1 Feb</th>
<th>1 Mar</th>
<th>1 Apr</th>
<th>27 Apr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea (KOSPI)</td>
<td>U.S. (S&amp;P 500)</td>
<td>Japan (Nikkei 225)</td>
<td>UK (FTSE 100)</td>
</tr>
<tr>
<td>-45</td>
<td>-40</td>
<td>-35</td>
<td>-30</td>
</tr>
</tbody>
</table>

Observations

- Steeper drop than in 1929
- Bigger sell-off than in 2008
- Higher volatility as in 2008

2. Peak VIX recorded 16/03/2020

Source: Impact of the COVID-19 pandemic on global FDI and GVCs, UNCTAD, Bloomberg, Reuters, Eikon BCG
TSR has rebounded over last month, but impact visible across all sectors; no sector above pre-crisis level across regions

As of 29 April 2020

Order of sectors reflects economic scenario and consumer sentiment

<table>
<thead>
<tr>
<th>TSR performance¹</th>
<th>Americas 21 Feb '20 – 29 Apr '20</th>
<th>Europe 21 Feb '20 – 29 Apr '20</th>
<th>Asia 21 Feb '20 – 29 Apr '20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food/staples Retail</strong></td>
<td>-10%</td>
<td>-15%</td>
<td>-8%</td>
</tr>
<tr>
<td><strong>Pharma</strong></td>
<td>-19%</td>
<td>-20%</td>
<td>-22%</td>
</tr>
<tr>
<td><strong>Semiconductors</strong></td>
<td>-30%</td>
<td>-43%</td>
<td>-27%</td>
</tr>
<tr>
<td><strong>Household Products</strong></td>
<td>-19%</td>
<td>-16%</td>
<td>-5%</td>
</tr>
<tr>
<td><strong>Telecom</strong></td>
<td>-17%</td>
<td>-20%</td>
<td>-14%</td>
</tr>
<tr>
<td><strong>Health Equipment</strong></td>
<td>-33%</td>
<td>-31%</td>
<td>-11%</td>
</tr>
<tr>
<td><strong>Tech Hardware</strong></td>
<td>-29%</td>
<td>-25%</td>
<td>-23%</td>
</tr>
<tr>
<td><strong>Food &amp; Beverage</strong></td>
<td>-26%</td>
<td>-24%</td>
<td>-12%</td>
</tr>
<tr>
<td><strong>Software</strong></td>
<td>-30%</td>
<td>-32%</td>
<td>-28%</td>
</tr>
<tr>
<td><strong>Materials</strong></td>
<td>-34%</td>
<td>-31%</td>
<td>-30%</td>
</tr>
<tr>
<td><strong>Prof. Services</strong></td>
<td>-30%</td>
<td>-29%</td>
<td>-31%</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td>-33%</td>
<td>-30%</td>
<td>-6%</td>
</tr>
<tr>
<td><strong>Retailing</strong></td>
<td>-42%</td>
<td>-36%</td>
<td>-26%</td>
</tr>
<tr>
<td><strong>Capital Goods</strong></td>
<td>-38%</td>
<td>-35%</td>
<td>-29%</td>
</tr>
<tr>
<td><strong>Media</strong></td>
<td>-36%</td>
<td>-36%</td>
<td>-14%</td>
</tr>
<tr>
<td><strong>Financials</strong></td>
<td>-36%</td>
<td>-35%</td>
<td>-19%</td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td>-37%</td>
<td>-38%</td>
<td>-13%</td>
</tr>
<tr>
<td><strong>Hospitality</strong></td>
<td>-49%</td>
<td>-47%</td>
<td>-23%</td>
</tr>
<tr>
<td><strong>Durable Goods</strong></td>
<td>-49%</td>
<td>-32%</td>
<td>-21%</td>
</tr>
<tr>
<td><strong>Real Estate</strong></td>
<td>-42%</td>
<td>-26%</td>
<td>-22%</td>
</tr>
<tr>
<td><strong>Insurance</strong></td>
<td>-42%</td>
<td>-40%</td>
<td>-27%</td>
</tr>
<tr>
<td><strong>Banks</strong></td>
<td>-41%</td>
<td>-44%</td>
<td>-26%</td>
</tr>
<tr>
<td><strong>Auto</strong></td>
<td>-47%</td>
<td>-45%</td>
<td>-32%</td>
</tr>
<tr>
<td><strong>Energy</strong></td>
<td>-56%</td>
<td>-45%</td>
<td>-41%</td>
</tr>
</tbody>
</table>

**Observations**

Non-discretionary/essential service less hit but still had recovery

First sectors recovering regionally

Broad set of industries experiencing pressure, with some regions particularly affected for certain sectors (e.g. Media in Europe)

Food & beverage, utilities, media, and health equipment generally better off in Asia

Hardest hit sectors had some recoveries but still performing way below 21 Feb 2020 levels

**Note:** As of 29 April 2020; Based on top S&P Global 1200 companies; Sectors are based on GICS definitions. TSR = Total Shareholder Return. ¹ Performance is tracked for two periods, first from 21 February 2020 (before international acceleration of outbreak) to 20 March 2020 (trough of the market) and from 20 March 2020 through 29 April 2020

Source: S&P Capital IQ; BCG ValueScience® Center; BCG
Credit risk continues to be a concern for majority of sectors

As of 29 April 2020

<table>
<thead>
<tr>
<th>Sector</th>
<th>Median 5-year CDS(^1) implied probability of default(^2)</th>
<th>Companies in distress (%)(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Healthier sectors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food/staples Retail</td>
<td>4%              5%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Pharma</td>
<td>3%              3%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Semiconductors</td>
<td>5%              7%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Household Products</td>
<td>4%              4%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Telecom</td>
<td>4%              7%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Health Equipment</td>
<td>4%              5%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Tech Hardware</td>
<td>4%              4%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Food &amp; Beverage</td>
<td>3%              3%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Software</td>
<td>4%              4%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Materials</td>
<td>4%              6%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Prof. Services</td>
<td>5%              5%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Utilities</td>
<td>3%              4%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Retailing</td>
<td>5%              7%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Capital Goods</td>
<td>3%              4%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Media</td>
<td>5%              8%</td>
<td>0%               0%</td>
</tr>
<tr>
<td><strong>Pressured sectors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financials</td>
<td>4%              6%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Transport</td>
<td>3%              3%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Hospitality</td>
<td>5%              11%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Durable Goods</td>
<td>4%              6%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>5%              9%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Insurance</td>
<td>4%              6%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Banks</td>
<td>4%              6%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Auto</td>
<td>5%              11%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Energy</td>
<td>5%              13%</td>
<td>0%               0%</td>
</tr>
<tr>
<td><strong>Vulnerable sectors</strong></td>
<td></td>
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<tr>
<td>Financials</td>
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<td>Transport</td>
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<td>0%               0%</td>
</tr>
<tr>
<td>Insurance</td>
<td>4%              6%</td>
<td>0%               0%</td>
</tr>
<tr>
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<td>0%               0%</td>
</tr>
<tr>
<td>Auto</td>
<td>5%              11%</td>
<td>0%               0%</td>
</tr>
<tr>
<td>Energy</td>
<td>5%              13%</td>
<td>0%               0%</td>
</tr>
</tbody>
</table>

Note: As of 29 April 2020; Based on top S&P Global 1200 companies; Sectors are based on GICS definitions
1. Credit Default Swap 2. Performance is tracked on 21 February 2020 (before international acceleration of outbreak), and 29 April 2020 3. Distressed comprises over 15% implied probability of default Source: S&P Capital IQ; BCG ValueScience® Center; BCG
 Majority of companies negatively affected—yet some companies in each sector manage to emerge much stronger

As of 29 April 2020

Year-to-date shareholder return in % per sector

Note: Sectors are based on GICS definitions; data as of 29 April 2020; Companies sampled from S&P Global 1200
Source: S&P Capital IQ; BCG ValueScience® Center
Guide for leaders
Fresh insights: messages for leaders
This week's focus: how to accelerate Digital & Technology transformation

Updated epidemic, economic, and business scenarios and impact
Preconditions for restart
Economic impact
Business impact

Appendix: Detailed action areas and further readings
Detailed action areas for business leaders
Further readings
Detailed measures across priority action areas (1/3)

Establish crisis management

1. Develop Scenario-Based Planning Approach to manage uncertainty
   - Deep-dive into possible outcomes of disease spread, demand shifts, supply/operations issues, regulatory requirements, and potential operations restart; adjust for sector-specific issues
   - Perform scenario stress tests around cash-flow
   - Establish preconditions for what it will take to get workforce back to offices, factories, etc.
   - Set up teams to work on different time horizons (Flatten, Fight, Future) to avoid reverting to crisis management across all

2. Create a Rapid Response and Transformation (RR&T) team
   - Establish nimble cross-functional Rapid Response & Transformation team (RR&T)
   - Refine processes to manage the crisis situation, remote working, disruption in supply
   - Ensure smooth transition of operations and workforce to the ‘new reality’
   - Shift to digital/remote customer interactions

3. Navigate through Flatten, Fight, and Future
   - Define policies to keep employees safe with high morale
   - Engage across levels to retain talent
   - Move to online/remote working; redefine rosters, and train for efficiency/effectiveness
   - Establish preconditions for coming back to the working environment; clearly communicate them
   - Build SWAT teams to address critical business areas, such as product launch, digital channel redesign, retail delivery models

4. Revamp Organization and People for the new normal
   - Frequently run scenarios and update plan; focus on understanding the de-averaged impact by geography and line of business, depth of demand drop, duration of Fight phase
   - Develop recommendations for daily planning, resources, supply chain, workforce, and other stakeholder management as per modeled scenarios
   - To manage the massive complexity of "restarting," enhance Rapid Response & Transformation team structures
   - Develop approach for how to bring people back to work, how/when to engage customers
   - Establish governance and standardization to effectively coordinate other areas from the RR&T

   - Get ahead of the curve to manage policies to get teams back to work safely
   - Take a clear view of forward demand and the new normal: manage/restructure organization to fit capacity needs
   - Create dedicated focus to accelerate digital, process automation, new ways of working

Source: BCG
Detailed measures across priority action areas (2/3)

**Flatten**
- Reach out to customers for their situation and needs,
- Drive actions to inspire confidence and ensure ability to deliver (multichannel, people-light approaches)
- Manage volatility in demand, and refine sales motions (to virtual, etc.) and objectives

**Fight**
- Assess changes in customers’ behaviors
- Adapt and transform channels (e-commerce), sales, marketing spend, pricing, and support
- Ramp up commercial efforts significantly to seize market shifts; leverage learnings to accelerate digital capabilities

**Source:** BCG
Navigate through Flatten, Fight, and Future

Emerge stronger; drive advantage in adversity

Accelerate Digital & Technology transformation

Help Society during COVID-19

Detailed measures across priority action areas (3/3)

Flatten

- Stress-test current value proposition and business offerings, and scan crisis impact on key customer/market trends
- Address and serve immediate workforce needs for remote working
- Leverage tools for conducting key processes online
- Adapt traditional processes to become digitally viable
- Ensure immediate support to employees, suppliers, communities, etc.
- Team with government/local communities/across industries to address crisis
- Leverage assets, supplier relationships, logistics networks, and employees to help adjacent communities
- Work across industry boundaries to identify cross-sectoral synergies to deploy solutions

Fight

- Plan for new projects to shift the portfolio and leverage the 'new normal'; plug capability gaps
- Identify white spaces in own industry and ecosystem
- Selectively invest in areas where opportunistic M&A can be conducted
- Develop and implement strategy to exploit greater talent availability
- Identify and implement key digital use cases and adapt to agile way of working
- Accelerate use cases to meet demand shifts
- Redesign key customer journeys with emphasis on digital interventions
- Determine how to contribute in the crisis to employees, customers, through medical response, supply of essential items for society, or by playing a positive economic/employment role
- Allocate innovation resources where possible to focus on solutions to COVID-19 crisis
- Leverage expertise developed to support government policies and responses, rebuild business for local customers, suppliers, etc.

Source: BCG
Further reading on facts, scenarios, and key focus areas for leaders

To know more, refer to the previous editions

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<td><strong>1. Facts, scenarios, and actions for business leaders</strong></td>
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| - Epidemic progression  
- Thinking on a multi-timescale perspective for leaders, preparing their responses across three phases:  
  (1) FLATTEN the COVID-19 infection curve, (2) collectively FIGHT the virus, preserve public health, and progressively reopen sectors of society and the economy, and (3) prepare for the FUTURE. | - Testing proliferation and digital tracking of the spread; race for the cure  
- Updates on government measures including first liftings of restrictions  
- BCG scenarios on duration and depth of economic impacts  
- Key questions and considerations for governmental and business leaders to address when restarting. | - Health care capacity and testing  
- Business preparation and public response as key to a sustainable transition  
- Consumer sentiments, economic impact forecasts, and TSR\(^1\) performance across industries  
- The relevance for business leaders to leverage real-time, leading indicators  
- Perspectives on how to prepare and win with innovation as an accelerator out of the crisis. |

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1. Total Shareholder Return  
Source: BCG  

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Additional perspectives on COVID-19

Selected overarching publications

- Technology & Digital
  - The Rise of the AI-Powered Company in the Postcrisis World
- People & Organizations
  - Take Care of Tech Talent When it Matters
- Globalization & Digital
  - The Race for Digital Advantage in Africa
- Media
  - Media Companies Amidst COVID-19
- Financial Institutions
  - For Banks, COVID-19 Makes Transformation That Much More Urgent
- Telecommunications
  - Time for action: In times of COVID-19 Telcos need to move rapidly to be part of the solution
- Health Care
  - Biopharma Applies New Service & Support Models amid COVID-19
- Transportation & Logistics
  - Transportation & logistics companies must adapt to keep supplies moving

Selected sector and functional publications

- Operations & Digital
  - Building the Bionic Supply Chain
- Crisis Response Checklist
  - Checklist
- Transformation
  - COVID19: Win the Fight, Win the Future
- Consumer
  - COVID-19 Consumer Sentiment Snapshot #7: Retracing the Old Normal
- Financial Institutions
  - Global Risk 2020: It’s Time for Banks to Self-Disrupt
- Automotive
  - Auto Companies Will Outlast COVID-19 & Come Out Stronger

Source: BCG
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