



Impact on the Automotive Industry: Navigating the Human and Business Impact of COVID-19

April 2020



01

Covid-19

External shock: One of the first pandemics of its kind that is forcing the automotive industry to re-think its business

02

The Disrupted Automotive Value Chain

What is the impact of Covid-19 on the automotive value chain

03

Rapid Response and Key Imperatives

How to address current disruptions and prepare for the 'new normal'

Global economies are heavily dependent on the automotive industry

In many respects, the automotive industry is essential for the global economy and the resulting prosperity:

Links to other industries: The automotive industry is a critical component of economic growth with extensive interconnections to upstream (e.g. steel, chemicals, textiles) and downstream industries (e.g. repair, mobility services).

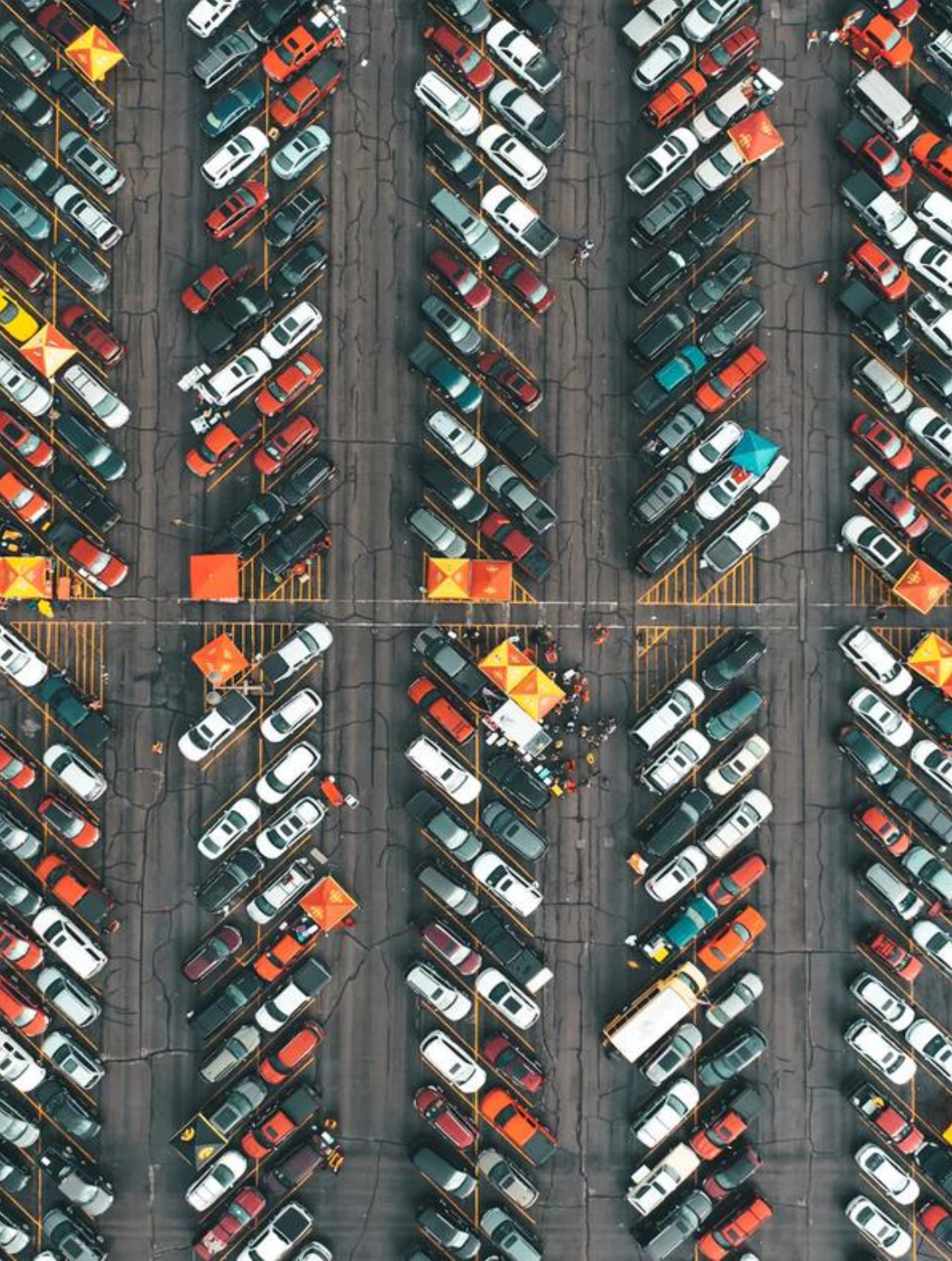
Employment in the automotive industry: With nearly 14 million people employed in Europe and 8 million in the US, as well as approximately 5 million in China, the figures highlight the importance of the sector.

Economy: The turnover earned by the automotive industry exceeds 7% of EU GDP, 3-3.5% of the overall GDP in the US and 10% in China.

Although it is currently a difficult time, the OEMs that are able to mobilize their COVID-19 response and take swift actions will be in a better position post-event and more resilient going forward.

Sources: Accenture Research analysis based on European Automobile Manufacturers Association, Stats.Gov.Cnh





The epidemic places even **more pressure** on the automotive industry

The automotive industry is disrupted by the four megatrends connected, autonomous, electric and shared driving, causing an unprecedented technology and business model transformation. Amid this transformation, the COVID-19 outbreak is putting **additional stress on the industry**.

After initial **supply and manufacturing disruptions**, the industry is now experiencing a **demand shock with uncertain recovery timeline** due to shelter-in-place regulations. With limited room to cut fixed costs, some OEMs have low **liquidity** to power through a long period of missing revenues. **Decreases in market capitalization** will likely accelerate industry consolidation and without securing **additional funding**, some players risk going out of business. **Changes in customer behavior**, such as different mobility preferences and online shopping expectations, might remain after the crisis.

To deal with the disruption, businesses need to execute actions over three timelines:

- a) A fast **response** to navigate the emerging situation with a focus on protecting people
- b) A **reset** of current business activities to adapt to new financial realities
- c) A **renewal** of strategic plans to emerge stronger after the crisis

What automotive **experts** are saying

PROFIT DILEMMA

“The Western European automobile market will need about 10 years to reach the size of 2019 again.”

Prof. Ferdinand Dudenhoeffer
Director of Germany’s Center
for Automotive Research

SUPPLY DILEMMA

“Even a disruption of one part [of the supply chain] could depress some U.S. auto production. We need all the parts to make a car, we can’t do it with 99.9%”

Kristin Dziczek
Vice President at the
Center for Automotive
Research

SALES DILEMMA

“The global auto industry is expected to witness an unprecedented and almost instant stalling of demand in 2020, with global auto sales forecast to plummet more than 12% from 2019, to 78.8 million units, [...].”

IHS Markit Analysis

DEMAND DILEMMA

“The real problem is on the demand side, people are not buying cars now, and sales volumes are expected to be very bad in March, with a real impact on automakers’ earnings”

Marco Pipari
Fidentiis Automotive
Research Analyst

01

Covid-19

External shock: One of the first pandemics of its kind that is forcing the automotive industry to re-think its business

02

The Disrupted Automotive Value Chain

What is the impact of Covid-19 on the automotive value chain

03

Rapid Response and Key Imperatives

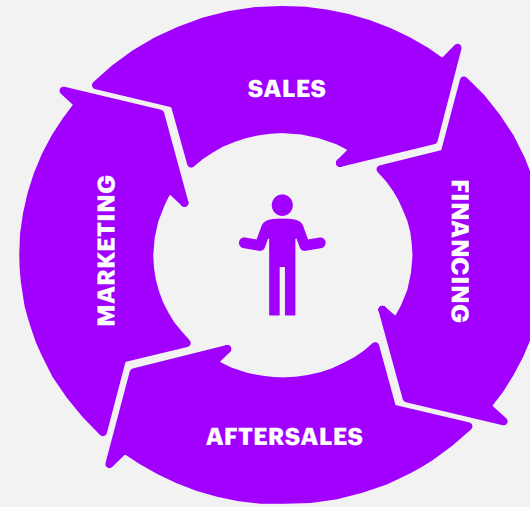
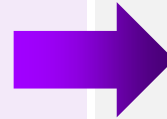
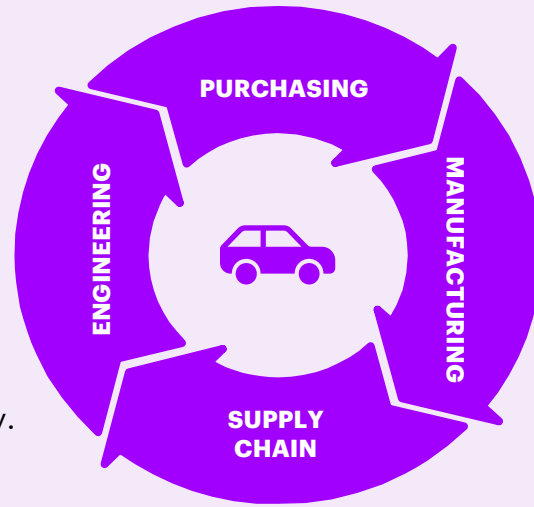
How to address current disruptions and prepare for the 'new normal'

Along the whole automotive value chain: Four major challenges amid the COVID-19 crisis



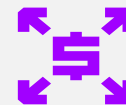
1. Limited Supply of Vehicle Parts

Starting in China, suppliers around the globe placed production lines in quarantine or shut them down completely. Also, legal and trade restrictions, such as closed borders, increased the shortage of required parts and limited distribution of supplies.



2. Shut down of Manufacturing

A limited parts supply and a just-in-time production strategy, coupled with quarantine measures and a reduced workforce, lead OEMs to shut down their production. This is enhanced by the need to secure liquidity and reduce overproduction due to the decrease in sales.



3. Declining Working Capital/ Liquidity

A decline in cash inflow resulted from the drop in demand while short-term liabilities and salaries still need to be paid. Cash reserves are likely to be exhausted within a few months.

4. Drop in New Vehicle Sales



Politically enforced measures to contain the virus, such as implementing curfews, closing factories, offices, dealerships and the resulting dismissals of short-time workers, as well as the fear of a recession, are likely to lead to a decrease in sales numbers.

COVID-19

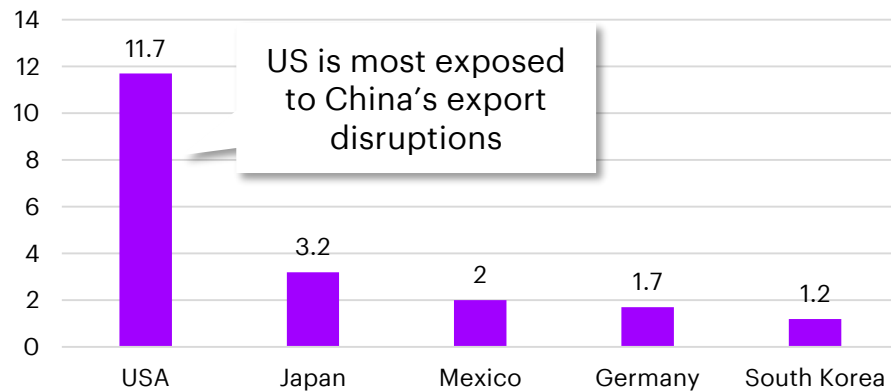
Supply: “Just-in-Time” production, global networks and lean inventory make the supply chain vulnerable to disruption



WHAT IS HAPPENING

Global Network: Chinese exports of vehicle parts and accessories

[in USD billion]



OES and LSP Examples [non-exhaustive]

- **Leading Freight Forwarder:** Delays with shipments due to increased health and safety measures at various borders (both land and sea).
- **Major Auto Components and Tire Suppliers:** Most of the production sites have stopped operations due to lacking demand from OEMs and workforce protection.

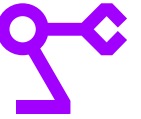
General Observations:

- The risk to supply chains has been compounded as OEMs have **created global networks** to leverage low-cost labor while striving for zero inventory to minimize working capital
- **Global auto production is strongly depending on China** (see graph on the left). **Supply shortage** is affecting assembly of all OEMs in NA, Europa and Asia
- In China, **almost 2/3** of auto **production** was directly affected by the shutdown with a large **impact** on their **suppliers** as well²
- Hubei province **accounts for ~9%** of **Chinese auto production**, disrupting supply chains until operations recover
- With factories operating at a fraction of capacity, and trucks not delivering, **ocean carriers cancelled many routes**
- Effects boosted by **legal and trade restrictions** such as closed borders

WHAT'S NEXT

- **Recovery** of the **auto supply chain** will **take time**, even with a multi-supplier scenario and **dependence on various factors**, such as regulations, availability of workforce and infrastructure, timely certification for safety parts, etc.
- Eventual **recovery** should lead to a **rebound in imports and exports**. However, the **re-start** will be **complex, cost-intensive** and will **take time** due to the need to synchronize production across the supply chain, i.e. due to just-in-time production.
- The trend to **decrease over-dependence** on one **country** will become more prominent. OEMs learning from the crisis enforce **dual sourcing** strategies. Also **flexibility of production** will be increased to **shift the production** from one plant to another.

Manufacturing: While NA & European OEMs are stopping production, operations in China are starting again



WHAT IS HAPPENING¹ [non-exhaustive]

Situation in North America

- OEMs stopped their production across NA
 - An **American electric vehicle company** was forced to shut down their factory under a shelter-in-place order
 - The **'Detroit 3'** automakers (and **other OEMs**) followed suit and also shut down their production in the **USA, Canada and Mexico**

Situation in China

- **Chinese plants**, after suffering a major shut down for a couple of weeks, **start up** as the **rest of the world shuts down**
- **Most leading OEMs** restarted almost all of their **production plants**

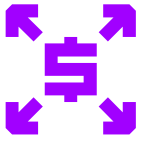
Situation in Europe

- All OEMs have shut down the majority of their European production:
 - **Leading German manufacturers** shut down the majority of their production in Europe for at least two weeks with other OEMs closing for longer
 - Other **multinational automakers** shut down the majority of their plants through the end of March
 - An **American multinational automaker** announced a temporary closure of all plants in continental Europe
- The majority of OEMs announced a **short-time work, overtime reduction, etc.** for selected administrative departments

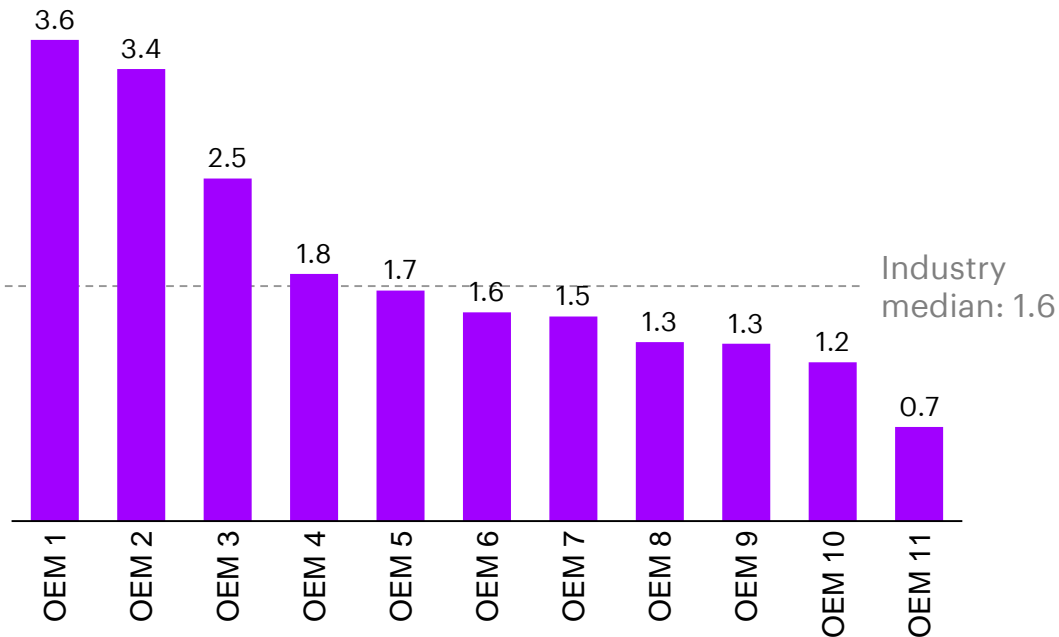
WHAT IS NEXT

- OEMs across the globe are **supporting local authorities** by helping to produce urgently required **medical equipment** (e.g. ventilators, face masks).
- The overall impact of production shutdowns due to collapsing demand, challenges with parts supply, and workers' safety will have a major economic impact in the short to medium run: **global automotive production** is estimated to **decline by 16%** in 2020².
- Shut down of production facilities in **Europe** is expected to **affect ~14 million jobs** (direct and indirect).
- **China** regulators are exploring **relaxing** of some **emissions standards** to provide relief for automakers battling an unprecedented slump.

Working Capital & Liquidity: A median cash burn rate of <2 months indicates short-term liquidity due to shutdowns



GROSS CASH BURN RATE [months, 2019]



WHAT IS HAPPENING & WHAT IS HAPPENING NEXT

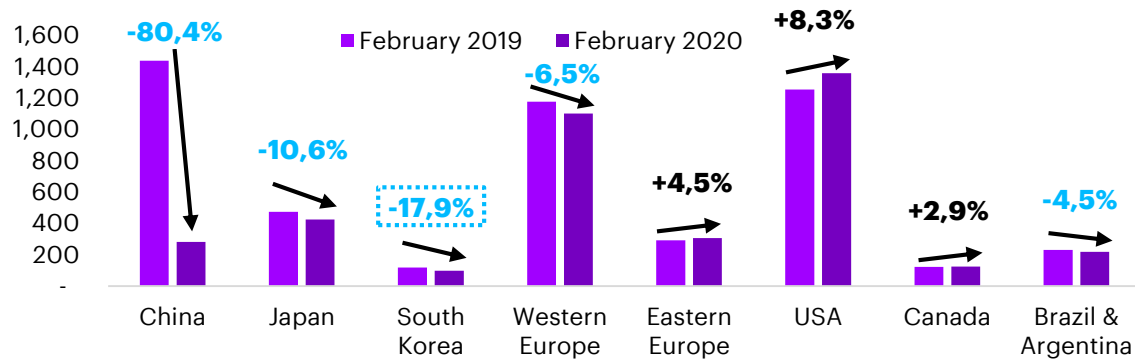
- Cash burn rate in the industry is currently less than 2 months. **Many OEMs will likely soon face liquidity issues as operating cash flow diminishes during the crisis.**
- Therefore, **OEMs are tightly managing cash flow and reviewing all non-existential expenses** to weather the storm, e.g. hiring freezes, delay of capex plans, etc.
- Moreover, several **OEMs are bargaining higher credit lines** with their banks to survive the crisis.
- **In addition, government aids might be necessary to prevent bankruptcies and job losses**, including funding for short-term work, short-term financing, tax deferrals, etc.
- **Dealers and suppliers are similarly vulnerable** to a sustained period of missing operating cash flows, e.g. due to a forced shutdown of dealer sales operations in many countries. Thus, OEMs should take the financial health of their key partners into account, e.g. extension of dealer payment terms, suspension of dealer targets, etc.

Cash Burn Rate = (cash & cash equivalents) / monthly operating expenses (excluding depreciation). A company's burn rate is also used as a measuring stick for its runway, the amount of time the company has before it runs out of money; Source: Bloomberg; Accenture

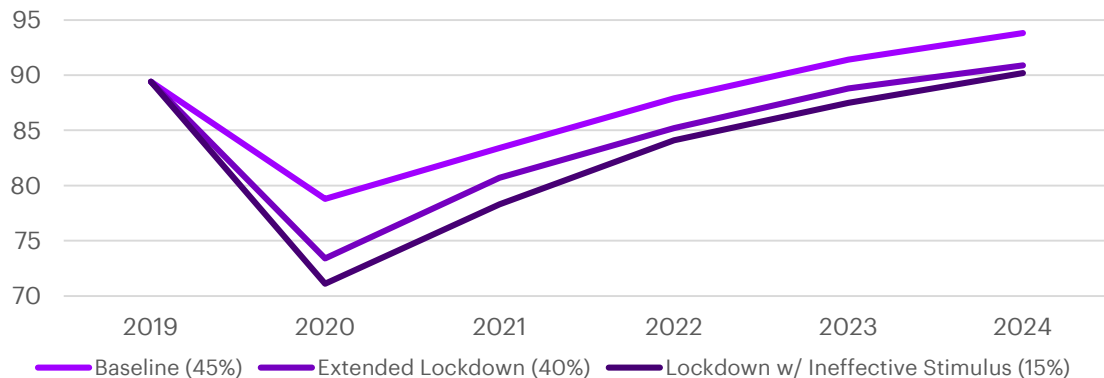


Vehicle Sales: February sales dropped by almost 20% compared to 2019. More than 2 yrs. needed for global recovery

Light Vehicle Sales Feb 2019 vs. Feb 2020 [in k units]¹



Light Vehicle Sales Forecast 2020-2024 [in million units]³



What is Happening & What is Next

- Overall, global automotive **light vehicle (LV) sales have dropped by ~20%** (YoY) from 6.335K in February 2019 to 5.077k in February 2020.
- China**, the first country hit by the virus, **experienced an enormous drop** in sales with **>80%** in February [followed by South Korea, Japan & Western Europe with sales dropped in all four major markets: Germany, France, Italy & Spain].
- Car sales in the **USA & Canada**, as well as **Eastern Europe**, were resilient until February due to the positive market outlook before the outbreak.
- With **rising COVID-19 cases** and an increasing number of **quarantine measures**, demand is expected to (further) **decline in March & April** in all parts of **Europe and North America**.
- In many European countries, dealers have already **stopped vehicle sales**. **Service** is still open but also facing **declining demand**.
- In **China >90%** of franchised new-car **dealerships have reopened**, but showroom traffic remains at 53% of normal levels²
- Current **developments are unlikely to change** in the near future:
 - Sales in China** are likely to drop by **more than 10%** in 2020³
 - Sales in the USA** are estimated to **decline by 15%** in 2020³
 - Sales in Western Europe** are expected to **decline by 14%** in 2020³

01

Covid-19

External shock: One of the first pandemics of its kind that is forcing the automotive industry to re-think its business

02

The Disrupted Automotive Value Chain

What is the impact of Covid-19 on the automotive value chain

03

Rapid Response and Key Imperatives

How to address current disruptions and prepare for the 'new normal'



The direction of the industry is expected to remain unchanged – but there is **uncertainty regarding the timeframe**

First, small signals of a rebound in the Chinese economy:

China's government is talking up the prospects for a rapid economic rebound. At the moment, one can already see that there are early first signs of a recovery in the Chinese economy, measured by the movement of people and goods, production, etc. Whether the recovery of the Chinese economy is sustainable cannot be said at this point in time.

Multiple possible rebound scenarios across the globe:

There are various scenarios for the recovery of individuals and the global economy. In general, three scenarios could be observed from previous crises (e.g. "Sharp V" triggered by SARS in 2003; "Short U" caused by the early recession in 1980; "Deep U" caused by financial crisis in 2008). The scenario will be driven by the combination of the resolution and containment of the medical emergency, the resulting consumer confidence, as well as the effects on the overall economy influenced by public intervention.

Slower adoption of the megatrends:

The direction of the automotive industry towards the four major megatrends (connected, autonomous, shared and electric driving) is expected to remain unchanged as trends will continue to drive the industry evolution going forward. However, the speed of adoption might change due to the emergency.

Considerable uncertainty regarding the timeframe:

As the timeframe cannot be predicted right now, industry players must be ready for all scenarios. Therefore, they must develop the capabilities to quickly identify the signals and direction – **how to manage the ongoing crisis, how to reset ways of working and how to renew for the "new normal"**.

To holistically react to the crisis, OEMs should align their strategic thinking along **three time horizons**

NOW RESPOND

How OEMs should respond to the ongoing crisis

- Implement measures for people safety
- Create transparency to enable effective decision-making
- Establish digital workplace taskforce to ensure effective collaboration

NEXT RESET

How OEMs should reset their ways of working

- Manage and mitigate risks across all functional areas
- Identify trapped value, especially in operating cost, to prevent a liquidity crunch
- Enable product portfolio shifts through flexible supply chains

RENEW

How OEMs should renew for the 'new normal'

- Create cost-efficient operational robustness by re-designing towards intelligent operations, with digitally enabled people and back-office processes
- Scan market for inorganic growth opportunities
- Reprioritize investment planning and strategic roadmaps

OEMs should develop concrete measures to tackle disruptions now, strengthen operations to increase future resilience and prepare for the 'new normal'

NOW RESPOND

How OEMs should respond to the ongoing crisis

NEXT RESET

How OEMs should reset their ways of working

THEN RENEW

How OEMs should renew for the 'new normal'



Cross-functional Enabler

Establish a **business control tower** to coordinate and enable cross-functional, quick and pragmatic responses



Supply Side

Mobilize a **control tower** to orchestrate the supply chain operations

Establish **risk mitigation** strategies

Re-design your **network** to increase resilience



Manufacturing

Increase safety measures during re-start

Prepare shock protocols to accelerate the shift when 'emergency mode' is needed

Establish IIoT concepts in manufacturing



Working Capital & Liquidity

Establish **working capital crisis mode** to increase cash burn rate

Establish regular **liquidity stress tests**

Infuse treasury management with AI



Vehicle Sales

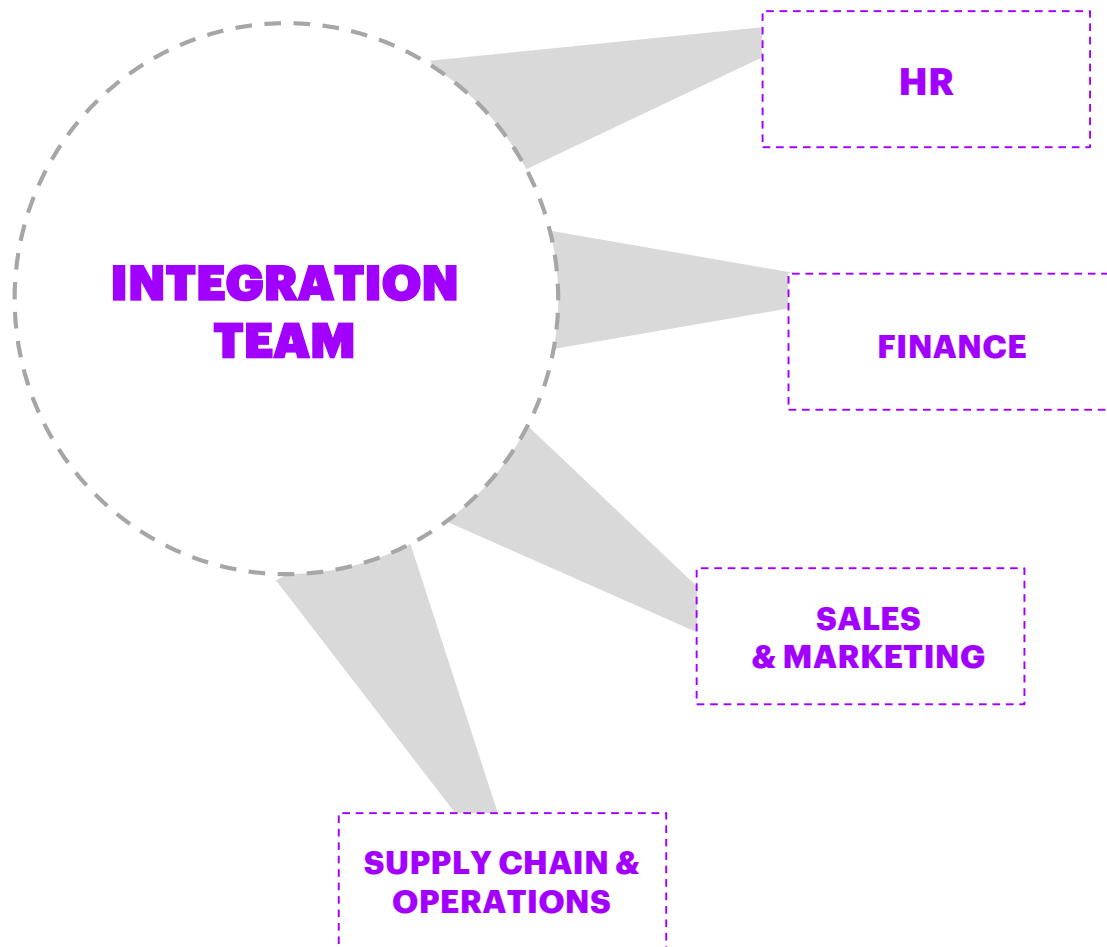
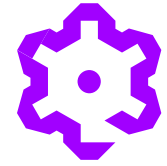
Setup remote processes to continue operations

Keep engaging with **customers**

Professionalize the **online-to-offline customer journey**, including pickup and delivery

Implement a **direct sales** model

Cross-functional: A business control tower enables quick and pragmatic reactions to a rapidly evolving situation



- **Cross-functional**
top management crisis response team coordinated by integration team; satellites in each region
- **Agile working mode**
with daily informal C-Level updates instead of lengthy reporting cycles
- **Data-driven**
decision taking based on daily updated health, macro-economic, industry and company data from different regions
- **Technology-enabled**
decision making and reporting to enable quicker actions, e.g. with AI
- **Forward-looking**
scenario planning and forecasting to prepare for different durations and impacts of the crisis and have a strategy at hand for the recovery and business restart

Supply Side Recommendations: Now & Next



NOW RESPOND

What can be done to stabilize the supply chain?

- **Mobilize a control tower to orchestrate the response:** Establish an operating model for responses related to supply chain interventions. Identify stakeholders, design governance, establish communication channels, and define processes to identify, prioritize and manage interventions. Appoint a single point of responsibility for owning the response plan. Once established, the center coordinates responses—from definition and alignment to communication.
- **Sense the risk and create E2E transparency:** Anticipate a disruption event with the help of big data, intelligent systems and connected ecosystems. Identify the potential exposure of each component to a risk all the way up the supply chain and prioritize risks accordingly.
- **Analyze the risks:** Evaluate the risk impact, both financially and operationally, model scenarios and evaluate alternatives.
- **Configure the risk response:** Develop a detailed action plan for components and suppliers with the greatest impact and decide which response actions to take, by whom and with what trade-offs / considerations. An effective plan uses a blend of levers, including shift sourcing to other geographies, identify alternative suppliers, ad hoc negotiations and safety stock.
- **Operate with agility:** Execute the response, monitor the results of execution and adjust the plan where necessary to ensure business continuity.

NEXT – RESET & RENEW

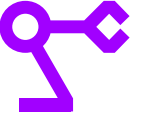
What can be done to ramp up operations and what adjustments need to be made post-crisis?

- **Operate risk mitigation as ‘business-as-usual’:** Integrate risk mitigation workflows, scenarios and (response) protocols into daily operations to quickly switch from normal to disruption response and ensure that learnings are scaled throughout the business.
- **Build resilient supply chains:** Increase supply chain visibility and allow proactive assessment and monitoring of risks to make the tradeoff between cost and risk. Leverage insights generated during the selection of suppliers and design the supply chain to decrease over-dependence on one country.



More on this topic: [Building supply chain resilience: What to do now and next during COVID-19](#)

Manufacturing Recommendations: Now & Next



NOW RESPOND

What can be done to support manufacturing?

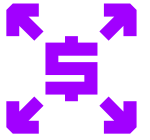
- **Prepare for tiered openings** – Execute a flexible, gradual ramp up, and prepare for early fluctuations in demand
- **Consider new worker safety and facility requirements, e.g.:**
 - Deploy hand sanitizers
 - Use glass walls in the logistics operations to separate employees
 - Hire specialized cleaning companies
- **Sync with suppliers** – Exchange and align with your suppliers and tier-2&3 suppliers to ensure fast and accurate ramp up
- **Adjust production output** – (If applicable) adjust part of production to needs produced by the crisis

NEXT – RESET & RENEW

What can be done to ramp up operations and what adjustments need to be made post-crisis?

- **Prepare (future) shock protocols:** Professionalize and update guidelines to accelerate the shift when ‘emergency mode’ needs to be activated.
- **Establish manufacturing resilience:** Make production in factories not only connected and autonomous, but also flexible to respond to demand shifts and customer preferences.

Working Capital & Liquidity Recommendations: Now & Next



NOW RESPOND

What can be done to stabilize working capital and liquidity?

- **Establish a working capital crisis mode:**
 - Accounts receivables: Establish immediate accounts receivables crisis management to get full transparency and allow accurate cash flow forecasting
 - Accounts payables: Prioritize all payment obligations
 - **Maintain a close exchange with major banks** – Audit and verify the assurance of committed syndicated credit lines in close exchange with major banks
- **Scrutinize subsidiaries** – Gain full immediate financial transparency and centralize selected or full corporate finance capabilities (e.g. CapEx, investment decisions)
- **Enter fixed costs emergency mode** – Examine possibilities for optimizing operations and personnel costs.

NEXT – RESET & RENEW

What can be done to ramp up operations and what adjustments need to be made post-crisis?

- **Infuse treasury management with AI:** Develop and implement AI treasury management to enable real-time cash flow overviews and forecasts.
- **Conduct liquidity stress test:** Prepare and conduct continuous liquidity reserve stress tests and limit insufficient funding channels (e.g. commercial paper).
- **Elastic digital workplace:** Ensure full digital corporate finance operations.

Vehicle Sales Recommendations: Now & Next



NOW RESPOND

What can be done to boost vehicle sales?

- **Keep engaging customers** – Use online or mobile channels to keep in contact with homebound customers to avoid churn during the shutdown. Utilize online live broadcasts to compensate for cancelled trade fairs as well as reinforce brand perception by e.g. showing commitment to solve global epidemic.
- **Pragmatically adjust the sales process** – Establish a contactless sales process to accommodate for hygiene concerns and quarantine conditions, e.g. with home delivery of test drive vehicles.
- **Draft a sales recovery plan** – Stimulating demand for luxury goods will be a challenge in the months after the crisis, despite some pent-up demand from the lockdown. Use the idle time to prepare a recovery plan including marketing and promotion measures (e.g. “revenge spending” in China) to kickstart sales as soon as possible.
- **Reevaluate pricing strategies** – As soon as the crisis ends (in the second or third quarter) and sales begin to rebound, prices will come under pressure as dealers try to empty inventories. Evaluate discount policies to balance volume and market share, profitability and brand image.

NEXT – RESET & RENEW

What can be done to ramp up sales and what adjustments need to be made post-crisis?

- **Follow-up on pent-up demand:** Proactively contact customers who have suspended their purchase journey after the crisis.
- **Professionalize online sales, including pickup and delivery:** Customers have turned online during the lockdown and some of this change is going to be permanent.
- **Control sales funnel data and retail costs:** Rapidly respond to fluctuating demand by implementing a direct sales model.



More on this topic: [The Future of Automotive Sales](#)

Three horizons to consider for the automotive industry

The current economic slowdown is hitting the industry hard and fast. Mastering the key industry trends, such as digitalization and electrification, continues to be essential for survival in a post-crisis world. Transformational projects should be continued or suspended rather than cancelled. We are here to assist our clients not only in navigating the immediate challenges of the COVID-19 crisis, but also in creating responsive and intelligent solutions that will pave your way to a successful future.

RESPOND

Business Control Tower

Accenture can help rapidly set up a data-driven war room to identify and mitigate immediate enterprise risks, detect early recovery signals and plan scenarios to ramp up sales & operations.

Business Continuity for Ongoing Projects

Accenture has put industry leading practices in place to continue to serve our customers remotely on their ongoing transformational projects throughout the crisis while protecting our own and our customers' employees.

Remote Working at Scale

Accenture can help to scale up and sustain IT for more virtual collaboration for homebound workers including change management to adopt a virtual collaboration culture.

Customer Engagement

Accenture can help to ensure customer engagement during the lockdown, e.g. by quickly ramping up digital channels or improving digital marketing ROI.

RESET

Online Sales Operations Excellence

Accenture can help to quickly set up online sales structures including additional manpower for lead handling through our delivery centers.

Production and supply chain ramp up

Accenture is ready to develop and implement measures for AI based production and supply chain management to enable organizations for a structured ramp up after crisis.

RENEW

Direct Sales Model Setup and Realization

Accenture has a strong expertise and track record in developing and realizing direct sales models for premium and volume OEMs, as well as helping decrease the cost of retail and create customer data transparency along the sales funnel.

Path to Supply Chain Resilience

From end-2-end supply chain monitoring to warehousing strategy—Accenture is ready to review and harden our customers supply chains for future disruptions.

Contacts



Axel Schmidt

Senior Managing Director
Global Mobility Lead
axel.schmidt@accenture.com



Teodoro Lio

Managing Director
European Mobility Lead
teodoro.lio@accenture.com



Brian Irwin

Managing Director
North America Mobility Lead
brian.irwin@accenture.com



Roland Mayr

Senior Managing Director
Greater China Mobility Lead
roland.mayr@accenture.com



Eiji Kawahara

Managing Director
Japan Mobility Lead
eiji.kawahara@accenture.com



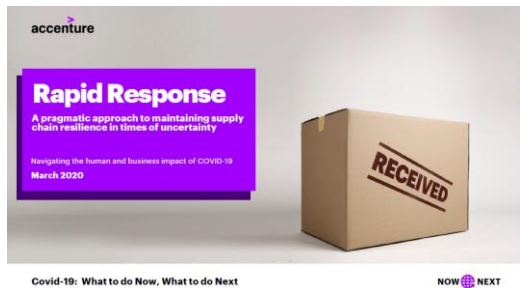
Andrea Cardoso

Managing Director
Latin America Mobility Lead
andrea.oneda.cardoso@accenture.com

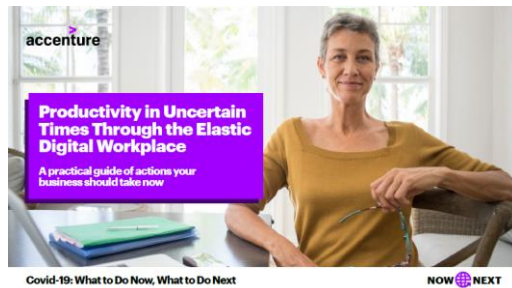
DISCLAIMER: This document is intended for general informational purposes only and does not take into account the reader's specific circumstances, and may not reflect the most current developments. Accenture disclaims, to the fullest extent permitted by applicable law, any and all liability for the accuracy and completeness of the information in this presentation and for any acts or omissions made based on such information. Accenture does not provide legal, regulatory, audit, or tax advice. Readers are responsible for obtaining such advice from their own legal counsel or other licensed professionals.

Copyright © 2020 Accenture All rights reserved. Accenture, its logo, and New Applied Now are trademarks of Accenture.

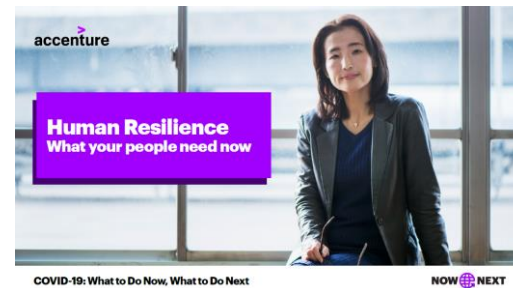
Further COVID-19 rapid response articles available on Accenture.com



Building supply chain resilience: What to do now and next during COVID-19



Productivity in uncertain times through the Elastic Digital Workplace



Human resilience: What your people need during COVID-19



COVID-19 responsive customer service in times of change