

COVID-19 Scenarios for Automotive and Transportation CIOs

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Initiatives: Manufacturing IT Optimization and Modernization and 1 more

Automotive and transportation industries CIOs trying to manage the COVID-19 crisis should consider scenario planning as a way to determine a course of action moving forward. Gartner lays out three plausible scenarios and makes recommendations for each.

Overview

Key Findings

- Automotive and transportation companies have experienced, and will continue to experience, significant reductions in revenue as a result of the COVID-19 virus.
- The outcomes of the pandemic are uncertain, so planning for multiple scenarios can give ClOs a better framework for responding.
- There are at least three plausible scenarios, including a best-case, medium-case and worst-case scenario. We have used the impact of storms thunderstorm, tornado and hurricane as metaphors for these scenarios.

Recommendations

As automotive and transportation CIOs pursuing manufacturing IT optimization and modernization, you must:

- Create at least three plausible scenarios on how COVID-19 might play out, including a scenario where the outlook is very poor for a long period of time.
- Set up a list of actions you would take under each of these scenarios that would preserve the business but also enable it to emerge stronger from the crisis.
- Adjust the scenarios as more information becomes available and it becomes clearer how the situation may turn out, then proceed with your planned actions for that circumstance.

Analysis

COVID-19 Impact on Automotive and Transportation Industries

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Perhaps no sector of the economy has been more immediately and directly affected by the spread of the COVID-19 virus than the transportation sector. In China, where the virus erupted and has hit hardest, air travel has declined by 70% and as the effects of the virus have spread across the world, air travel has collapsed. ¹ Auto purchases in China have declined by a staggering 80% in February compared with a year ago and production of new vehicles has ground to a halt. ²

The spread of the virus appears to have slowed in China, only after a massive, countrywide response, and it is becoming increasingly clear that COVID-19 will spread around the world. Just how long countries in the midst of the crisis will remain in a state of emergency is unknown. The impacts in every country may vary — from as bad or worse than China — to as good as nearby Taiwan. However, the short-term results are clear: there will be dark times for the transportation industry ahead.

As a CIO, and a leader in your organization, the question is not really whether the virus will have a dramatic impact on your organization and customers, but how long will the impact last and how big will it be.

In a time when the outcome and severity is very hard to predict, Gartner recommends scenario planning. As an organization, we have done scenario plans for the long-term evolution of nearly every industry that we closely cover. Here are a few of the industry scenario documents on the subject:

- "Manufacturing Industry Scenarios in 2023: Find the Right Things to Do, and Do Them Faster and Better"
- "Retail Scenarios for 2025 and Beyond Elasticity Stretches by Leveraging Technology to Serve Customers"
- "Use Banking Industry Scenarios to Generate New Value in the Digital Platform Age"

We extol the value of scenario planning because it has been shown to make organizations more flexible and responsive to change. As a species, humans are more optimistic about outcomes than they should be and also lend more credence to events that they remember than they should. For example, most executives can remember that the H1N1 virus did not disrupt the world as much as expected in 2009.

We suggest creating your own scenario plans, focusing on having at least three plausible scenarios and the actions you should take in each of these scenarios (see Figure 1). If there are actions that make sense in all of them, then those should be prioritized.



Figure 1. Scenarios for COVID-19 Effects on the Automotive and Transportation Industries

Scenarios for COVID-19 Effects on the Automotive and Transportation Industries



Damaging, but will pass and potentially result in an economic snapback.

Source: Gartner 722705 C



Destructive, with regional and possibly global recession, resulting in business restructuring.



Devastating, with significant global recession and longterm business health implications.

To help get you started, we have assembled three scenarios and recommendations under each.

Three Scenarios for Determining a Course of Action

Scenario 1. The Quick Resolution (The Thunderstorm)

This scenario is marked by the expected gradual and steady reduction of cases in China in the next several weeks. This gives other countries a blueprint on how to combat the spread of the virus as well as a timeline for how long it will remain a public health threat. In this scenario, social distancing and prevention keep the medical system from being overwhelmed by a spike of infections. Heavily affected countries, such as Italy, move through infection and treatment cycle more quickly than China because of the much lower density of population centers.

In the quick resolution scenario, year-end business results in consumer and cargo transportation are likely to be down, but not severely, as a return to normalcy may result in a second-half surge in business and recreational travel. Automobile purchases are likely to boom in China, the largest automotive market, in the summer months, though there may be a lingering overall effect on sales that drags results lower for the year. Revenues for passenger trains, public transportation, cabs and ride-hailing services will return to normal, but because these are daily use forms of transportation, they won't recover lost revenue.

Despite this scenario being short in time period, airlines are highly unlikely to recover lost revenue in this calendar year. Many have already offered free cancellation on bookings, but may not be able to cancel flights just because some of the customers have canceled. Later, these same airlines will be flying passengers based on fares that have already been recognized, so they will have to allocate capacity without commensurate revenue. This scenario anticipates significant economic impact from the virus, but only a few months in duration. Longer term, airlines should anticipate



the potential that a rapid move toward home-based work could reduce business travel permanently.

Recommendations for automotive and transportation CIOs:

- Continue or increase investments and implementation of supply chain management/visibility software. There will be pressure to rein in costs, but these investments could be vital to preserving the business and dealing with any surge in business following the rebound.
- Work with automotive/transportation dealers to enable new ways of selling or servicing vehicles that do not require in-person visits. Now is the time to update vehicle configuration systems and try proofs of concept related to online vehicle sales or even remote service (see "COVID-19: Technology Can Mitigate Car Sales Slump").
- Discover ways to supplement education for your staff through online courses if workers have canceled conferences or other educational events. This will help the organization and may also boost morale.
- Contemplate short-term outsourcing help in IT from regions not currently affected. Expect that absenteeism will be rampant when your region begins its battle with the virus outbreak.

Scenario 2. The Longer Resolution (The Tornado)

In this scenario, the effects of the virus lead to regional and possibly global recessions that take more than six months to return to economic growth. This scenario is marked by a global inability to contain the virus, leading to mass closures of venues, events, businesses and schools over an extended period. Other nations could similarly be affected, but the lack of consistent healthcare in the U.S. and elsewhere for service workers could lead to an economic calamity as workers are unable to take sick time and either lose their jobs or continue working and spread the virus. This would inevitably lead to a significant reduction in both manufacturing output by the automakers and demand from the consumer. A lengthy depression in demand has been shown to have dramatic impacts on the auto industry in the past. In 2008, a 30% decline in volume forced the bankruptcy of General Motors and Chrysler; albeit, the companies were heavily leveraged and had much higher costs per employee than today. High fixed costs mean that big dips in demand can send even healthy companies into financial strain.

Airlines under this scenario would not see a return to normal activity levels for more than a year. Already, there are signs from major airlines that they are anticipating a dramatic and long-term reduction in capacity. Austrian Airlines stopped all flights on 18 March 2020, for instance. This massive reduction in capacity is likely to lead to bankruptcies and possibly mergers. When demand cannot be significantly improved by lowering fares, the airlines will be forced to dramatically cut capacity, leaving expensive jets in the hangar and putting financial pressure on every organization. Government support of aviation is likely to prevent a collapse of the airline industry.



Lower demand from both the recession and continued fear of disease transmission could put dramatic financial pressure on public and private transportation in the long term. Government workers may be somewhat insulated. There could be a shift in this environment for gig economy workers to begin transporting goods as people order more food and other staples rather than go to stores.

Recommendations for automotive and transportation CIOs:

- Ensure that the CFO has the appropriate tools for financial modeling of a new, and much lower, demand. Continue supply chain investments.
- Halt all nonessential purchases of work computers, devices and other equipment to preserve cash.
- Renegotiate volume-based service contracts, if possible.
- Do not abandon new business model investments as these new models may be more viable in times of distress. Some of the most disruptive technologies of the past decade, including Uber and the smartphone app economy, grew during the last recession.
- Contemplate long-term outsourcing help in IT from regions not currently affected. Expect that absenteeism will be rampant when your region begins its battle with the virus outbreak.

Scenario 3. There Is No Short-Term Resolution (The Hurricane)

In this scenario, society has changed as a result of the virus. The virus is not contained or containable, and the world population contracts as it spreads around the globe, causing wave after wave of emergencies. Every economy on Earth has felt the impact of the virus. The economic global recession lasts as long as a year and GDP declines significantly as the disruption upends huge swaths of the economy.

Corporate debt defaults trigger major unemployment events in many economies, further suppressing demand, and healthcare systems are overrun by the added strain.

In this environment automotive sales and use of air and public transportation will remain depressed for an extended period, leading to mass layoffs, bankruptcies and restructuring. There likely could be a major consolidation of automotive companies, and investments in transformative areas, such as connectivity, autonomy, electrification and shared mobility will grind to a halt as the companies scramble for survival.

On the other side of the crisis, there will be a leaner industry and one that will be adapted to a much lower level of global sales. It could be more heavily focused on mobility services as people have put off purchases of new vehicles, or the virus could compel people to own their own vehicles, keeping them out of virulent places.



Recommendations for automotive and transportation CIOs:

- Take advantage of the dramatic downsizing in staff and resources. Consider a major migration to a cloud-based platform that can be scaled up or down based on demand rather than investing in large assets that require a specific amount of demand to be supported.
- Use the deep dip as an opportunity to propose changing business models and investing in small revenue areas that might emerge from a changed world, like flexible ownership models, subscription services and multimodal transportation platforms.
- Search for opportunities in the disruption to acquire companies or talent that otherwise would be expensive or hard to find.

Evidence

¹ "UPDATE 4 — United Airlines Cuts Flights, Freezes Hiring as Coronavirus Hits Demand," CNBC.

² "China Auto Sales Plunge in February Amid Virus Shutdown," Washington Post.

Recommended by the Author

Pandemic Planning: Responding to Coronavirus and Other Emerging Risks

Toolkit: Pandemic Preparedness Briefing

Managing Ambiguity in Crisis Escalation Procedures

Supply Chain Brief: Global Supply Chains Prepare for Impact From Coronavirus

Overcoming the COVID-19 Crisis Through Pandemic Preparedness

Scenario Planning for Economic Uncertainty

Coronavirus Requires Supply Chain Leaders to Adopt Enhanced Decision-Making Abilities

Coronavirus Alters Supply Chain Dynamics Impacting People, Products and Costs

Recommended For You

Covid-19 Fast Response for Manufacturing CIOs

COVID-19 Fast Response for CPG Manufacturing CIOs

COVID-19: Technology Can Mitigate Car Sales Slump

How Can ClOs Keep the COVID-19 Pandemic From Overshadowing Their Sustainability Efforts?

Video: Automotive Manufacturing ClOs' COVID-19 Cost Optimization Action Plan

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